

A TEXT BOOK OF
INDIAN ECONOMICS

INDIAN ECONOMICS

VOL. I.

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CHAPTER I

INTRODUCTORY

Nature of the study. The modern science of Political Economy or Economics, as it is popularly called, originated about a century and a half ago in the European countries. Even during the period of its evolution and development there, it forced its way into India. It was with the advent of the Europeans in this country and gradual transference of Indian political power into British hands that the basic principles and laws of this science, which were then prevalent there, began to be applied to the economic problems of India in those days. This led to the beginnings of what we now term "Indian Economics."

But in those days such a term as 'Indian Economics' was regarded a sort of a misnomer, and to some it seemed as "uncouth and infelicitous" as it was "misleading", because it was argued that the principles of Economics as developed in the industrial countries of the West could not be applied to an agricultural country like India; her economic conditions being widely different from those of the Western industrial countries at that time. Many Indian economists like Justice Ranade drew the conclusion from such a view that the alleged absolute and universal principles of Economics then in vogue in the west were not applicable in the case of India.

Political Economy at that time assumed man to be wholly absorbed in the pursuit of wealth guided by selfish motives; it assumed that each individual's own gain led to the good of the society; that all governmental interference was unnecessary, and that labour and capital were perfectly mobile, etc., etc. Such like assumptions were conspicuous by their absence in a country like India where the economic forces of the day, *e.g.*, the desire for wealth, for self-interest, for enlightened individualism, and for free and unlimited competition was not so powerful as in the west. This led people like Ranade to protest emphatically against the dogmatic policy of applying the so-called universal truths of classical Political Economy to the economic conditions of India.

A survey of the later developments of the economic thought in the western countries and a study of the present day Indian conditions show that since then both India and Political Economy have undergone considerable changes and modifications. Economists have learnt

properly to emphasize the hypothetical nature of the laws of their science, and no longer claim universal validity for them. Neither Economics is now a perfect science, nor its laws of universal application. It has become more realistic and practical by modifying its assumptions.

The changes in the Indian economic phenomena also are moving in a direction so as to make the economic structure and organization of the country and the conditions of her life and labour similar to those found in the West.

Whereas on the one hand the 'economic man' who cared for wealth and was ever engaged in selfish pursuits, has disappeared from the text books of Economics, and the science deals to-day with man as he is, "a man of flesh and blood, with all his vanities, affections and imperfections," the economic phenomena of India on the other hand are passing through such stages of economic transition as are bringing them nearer to those of the western countries. The older habits and customs of the Indian people are being modified by the impact of western ideas and ideals. The older influences of caste, custom, and tradition are crumbling before the more powerful force of economic motives of the individual as well as the society.

These changes are of great significance for us as they have made the principles of economic science less inapplicable to Indian problems.

The science of Economics claims to be "a study of mankind in the ordinary business of life." It is a science of those motives, notions, and activities of man, which actuate him in the acquisition and use of wealth. It no longer remains confined to the old, narrow dogmatic and absolute character, but is now based on those general characteristics of human nature which are always and everywhere the same. It is now a statement of certain tendencies, more or less certain, more or less definite. It now stands on the improved basis that the same sets of causes always tend to produce similar sets of effects under given circumstances.

This has paved the way to the applicability of a western science to Indian conditions, and a general growth of these problems which have been collectively termed 'INDIAN ECONOMICS.'

The term 'Indian Economics' explained. The term no more remains misleading, and the application of the present day recognised economic theories to Indian problems shows

that there is every justification of its existence as a separate entity in the field of universal economic science. Indian Economics, then, "may briefly, simply, and sufficiently be described as a study of the principal economic problems in India with an analysis of their probable causes and of any measures that have been or might be taken to deal with them."

And what do we understand by the phrase 'Indian economic problems'? Indian economic problems may be defined as 'deductions which follow from the application of western economic laws to Indian economic conditions.' The subject matter of these western economic laws has been well put by an economist thus :

"It is a body of scientifically arranged knowledge which seeks to consider the actions of men in consuming such wealth as they possess or obtain as the result of the efforts of themselves and of others; in producing further wealth for themselves or for their fellows by utilising and developing the resources of nature; in exchanging one with the other, a part of the wealth which they possess for other wealth which they desire, and finally it considers and investigates how and in what proportions the total wealth of a community is distributed amongst its many classes and individuals." Hence the subject-matter of Indian economic problems will be a survey of different problems and phenomena of Indian life which are concerned with or have any bearing on the consumption, production, exchange or distribution of wealth.

Scope of Indian Economics. We will consider all the four aspects of every problem in this connection, namely historical, positive, normative, and practical. (In the first aspect we shall consider the general historical development of each economic problem of India during the last eighty years or so, the period since Indian political power passed into the hands of the British Crown, and whence began our present day economic problems.) (The second aspect will include a bare statement of the present position of every problem, with a consideration of the degree of progress it has reached since its beginning.) Then will come the normative aspect including the ethical part of the problems, wherein we shall discuss the future development and progress of every problem. For this purpose will be required not only a consideration of the economic resources and possibilities of further development of this country, but we shall also study the developments of some of the modern industrialised countries so as to gather what ought to be the proper course of action to be

taken by us for our own well-being. The last phase, *i.e.*, the practical side, will cover the field of those suggestions, remedies and methods which we have enunciated in order to arrive at our ideal. It shall discover how we are to put into action our schemes and plans so as to make our country prosperous and progressive economically.

The plan of the study. As to the plan of the work we have divided our study into four main parts. Part one studies the general background in which the geographical human and social factors are brought into proper relief. This is followed by a survey of the economic activity of the nation in relation to Agriculture and Industry and here all the relevant problems of the structure of production are discussed. This comprises Part II of the book. In Part III attention is directed towards the means and methods of exchange which include, Transport facilities, Trade, Prices. Currency, Exchange, Banks and Credit. The final part is given to the study of Public finance in all its various aspects.

Different interpretations of the term 'Indian Economics.'

Such an order of treatment of the problems of Indian Economics under the usual headings of the departments of the Science of Political Economy should not lead us to imagine that Indian Economics is only a discourse on the principles of economic science illustrated with the help of Indian facts and figures. We may not give any such discourse the title of Indian Economics, which is on the other hand, "a *realistic* study *wholly* concerned with the facts and problems of Indian Economic life, reference to economic theory proper being relevant only in so far as it helps the understanding of these facts and problems."

Besides this the term 'Indian Economics' was for some time given another wrong interpretation, based on the wrong notion that it is something fundamentally different from the professed principles of Political Economy. *Morison* held this view when he said, "When we approach the study of economic phenomena of India we must bear in mind that we are about to deal with a type of Industrial organization which is not the type tacitly assumed in most text books upon abstract Economics." There is no such thing as an altogether new science of Economics "created out of Indian materials." If Economics is a study of mankind in the ordinary business of life, and if the motives which lead men to engage in the production of wealth in India are the same as in western countries, a study of facts of Indian Economic life cannot be expected to reveal the existence of entirely new laws governing the production

and exchange, distribution and consumption of wealth. No such laws have been discovered. There is thus no science of Indian Economics as apart from the science of General Economics.

"Indian Economics is consequently a study of Indian Economic life (facts as well as problems) in the light of our knowledge of the general principles of Economics." It should never be taken to mean a novel body of economic laws deduced from the peculiar economic data, facts, and circumstances of India, quite different from those professed in the West.

This shows that for a fuller treatment of the Indian Economic problems a study of their historical growth as well as the different statistics concerning them is indispensable. For sometime each of these branches of Indian Economics was supposed to be synonymous with that term, but it is now quite clear and apparent that the scope of our subject is not so narrow as to be limited to either of these considerations; still they form an essential part of the whole study and have their utility in their own spheres, because almost in all economic problems of the day confronting our country we will not be able to do without either a survey of the historical development of those problems or a collection of all the relevant tables, figures and statistics concerning them.

We could give another possible meaning to the term, 'Indian Economics,'—that of the History of Indian Economic Thought from the earliest times to the present day. Such a survey may unfortunately become a study of some conflicting views and principles which may be found to have been in vogue at different periods of Indian History. In the first stage of its development we may have only an unconnected narrative of what were the ancient Indian views, during the different periods of ancient Indian History on the economic aspect of man's social life. And in the next stage, we may have an application merely of the western ideas and influences on Indian Economic problems, and which may not be in conformity with the ancient but indigenous Indian Economic thought.

This should not deter us from using the term Indian Economics in the sense of 'A History of Indian Economic Thought' (though to avoid the confusion we should make use of this fuller term, when this particular sense is to be conveyed).

Having a due regard to the scope of the present day Indian Economic problems, the importance of their study can neither be denied nor over-estimated. There is every

justification for treating it as a separate branch of study keeping in view the vast field of study and research it comprises. Moreover, for a clear comprehension of the present economic conditions of India in relation to those of the whole world, for a right representation of the Indian Economic policy from the nationalistic standpoint, and for an enunciation of the true economic interests of the country's masses the study of Indian Economics is not only necessary, but indispensable.

Aim of the study of Indian Economics and its difficulties. This necessity becomes all the more justifiable when we know that a study of Indian Economics presupposes a desire for material advancement and is meant to direct our activities to our economic well-being and prosperity.

But herein we have to face a double difficulty. The first is a clash between our national interests and those of our rulers. As may be the case in any other dependent country so it is in India, that the interests of the ruler and the ruled are not always the same. This has given rise to two conflicting schools of thought—the one supporting economic policies of the Government and the other showing dissenting views. In between these two groups of Indian Economists are found a number of thinkers with moderate and modified views.

Under these diversities of opinions and interests the Indian Economist is, in no way, in a happy position. But with the help of an unbiassed mind his line of enquiry should be both rational and national and his aim should be always to promote the economic progress of his country.

The second difficulty is the general dissociation of Indian masses from the country's economic administration because of their illiteracy and ignorance. Their present daily habits and activities establish the sorry fact that they are almost at the zero point on the scale of economic progress. Their inertia and apathy towards their own welfare is cutting at the very roots of their existence. Is it not then sufficient to hold that one of the immediate needs of our present day activities is not only to have a clear understanding of the following discussions but also to make them as widely diffused as possible so as to spread a mass awakening and enlightenment about the economic forces of the world at large and the position India holds therein?

SUMMARY

It was with the advent of Europeans in India since the 18th century that the main principles of the modern science of Economics, prevalent there at that time, came to be applied to the conditions prevailing in India. This was the beginning of our present-day "Indian Economics". At that time such a term was supposed to be a misnomer, as it was thought that the alleged universal principles of Political Economy developed in the Industrial West could not be applied to Indian conditions which were so different from those of the western countries. Almost all the assumptions made by the economists in the West were not to be found operating in India. A voice of protest was thus raised to this effect by some eminent Indians of the day.

Later on Indian conditions as well as the western economic thought began undergoing gradual changes which brought the two nearer each other. On the one hand, economic assumptions were modified and made more practical and realistic, and its principles more general and less rigid; on the other hand life in India began to move towards conditions identical with those of the West. This paved the way to the applicability of the modified economic laws to India. "Indian Economics" thus came to be a real study of all the economic problems of India concerned with the production, exchange, distribution and consumption of wealth in the country. We study these problems now in all their four aspects namely historical, positive, normative and practical giving the whole study the cognomen 'Indian Economics'.

The subject begins with a review of the geographical features and the social and religious background of the country, and goes on to an estimate of her present economic stage of development. Then come problems connected with agriculture, trade and transport, and the distribution and mechanism of exchange, finance and currency. In this connection we have to guard ourselves against a double misconception. The first is that a study of our economic problems according to the usual classification of the economic science should not make us believe that Indian Economics is merely a study of the economic principles illustrated with Indian facts and figures. The second misconception is that Indian Economics is not at all a new science totally different from the main Political Economy. This was a view held by some authorities some time ago. Again another meaning is sometimes given to this term, that of the History of Indian Economic Thought. But where the term Indian Economics is used in this sense it is better to use the fuller term History of Indian Economic Thought instead.

The importance and utility of our present study is a comprehension of the present day position of Indian economic conditions with a desire for material advancement. This shall enable us to pronounce properly the real need of India at the critical period of her history. In this matter there is such a confused and complex mass of conflicting views, interests and designs as to make the business of a student of Indian economics very difficult. In such a medley of affairs it is but proper to adopt a rational as well as a national line of enquiry to arrive at the proper conclusions.

Besides this it is also incumbent on us—students of Indian Economics—to remove the general apathy of our countrymen towards the economic programme and economic policies of our Government as these effect our national progress.

QUESTIONS ON CHAPTER I

1. Examine critically the application of modern economic theory as developed in the west to Indian Economic conditions.

(P. U. 1914 and 1916)

2. "Indian Economics is a misleading term, and there would be advantage in abandoning its use altogether." Explain and criticise.

3. Discuss the propriety of considering 'Indian Economics' as a separate subject of study, and outline its scope.

4. What are the difficulties which the student of Indian Economics has to face ?

CHAPTER II

GEOGRAPHICAL FACTORS

Nature's Bounty. The relation between the Geography of a country and its economic life and welfare is very great. It is the study of geography which "attempts to answer how the various geographical features of a country have influenced the activity of the people living therein." The physical environments and the natural resources largely determine the foundations of its economic wealth and prosperity. The gifts of nature and their use made by man play a great role in deciding its relative place in the economic world. The nature of the soil and the climate, and, the sources and methods of irrigation affect the vegetable products of a country. Upon the supply of raw material and the presence of minerals depends the scope of its industrial development. The proximity of a country to the sea, possession of safe and ample harbours, internal communication and means of transport—all these explain the commercial supremacy of a large number of countries. All these factors combined, and, utilised in the best manner, tend to make a country economically more advanced. So before taking up a discussion of the actual economic phenomena of India we shall give a short account of all the above factors concerning her physical position, environments and natural resources.

Location and Environment. India lies in the north-eastern hemisphere between 8° and 37° north latitudes and 61° and 101° east longitudes. It comprises an area of 1,805,232 square miles. The north portion of this vast country, which is a part of the continent of Asia, is in the temperate zone, while the southern portion, which is peninsular and is bounded by the sea on East, West and South, lies in the tropics. The greatest length of the country from north to south is about 2,000 miles and from east to west the greatest breadth is about 2,500 miles. The land frontier is nearly 6,000 miles and the whole coastline measures nearly 5,000 miles.

India is remarkable for its natural boundaries. The land frontiers consist of lofty mountain chains. The mountains are the highest towards the north where the Himalayas effectually protect India from northern invasion. But the Eastern barriers—mountains of Assam and Burma—are not insurmountable, while the Suleman range on the west contains many passes, which have been the routes of

many invaders. On the south are the sea boundaries of Indian Ocean with its two offshoots—the Bay of the Bengal on the east and the Arabian Sea on the west.

Because of her vastness, India has been called a continent or a sub-continent and not merely a country. It may be a world in itself, because of the divergences of nationalities, customs, languages and religions of its people and the contrasts of its climate and natural phenomena. The truth is, as an Indian economist says: "The India with which we have to deal as an economic unit is a sub-continent being hammered into a nation and is therefore a subject or study of unique interest. With the N. W. F. P. on one side and Burma on the other it is like a federation of peoples whose natural and artificial boundaries are being levelled down by the unifying process of modern civilization and of one common law and government."

Physically India occupies a very favourable and advantageous situation from an economic point of view. Standing almost at the centre of the eastern hemisphere it commands trade routes in all directions—by sea as well as by land and air. Because of the development and extension of these routes on all the sides as well as of her internal system of transportation, the economic importance of its situation is increasing more and more.

The only handicap which may stand in the way of India's economic progress is the limited number of her natural harbours capable of accomodating big modern vessels. Practically 6/7ths of India's foreign trade is concentrated in five of her ports only—Calcutta, Bombay, Rangoon, Madras and Karachi, to name them in order of their importance. Of these, Bombay and Karachi alone are natural harbours.

Her coastline being little broken or indented, the water being shallow in many places around the west coast, and the east coast being specially serf-bound, India cannot claim to have many good harbours. The heavy mansoons of the year also play their part in this respect. Karachi, Bombay and Goa are the only reliable harbours on the west coast, while on the eastern coast Madras and Vizagapatam have been constructed to serve as ports at heavy costs. Calcutta, too, suffers from the bars formed in the river Hoogly and so does Chittagong. The harbours of Burma, *e. g.*, Rangoon, Moulmein, Bassein, have the double disadvantage of being as much distant from the sea as closed to the interior for lack of internal communications. All this can be remedied if a vigorous action be taken to

increase and construct new harbours and to revive some old ones.

As regards inland communications, Northern India stands in a better position than the peninsula, where the construction of roads and railways is as expensive and difficult as navigation by rivers. Greater impetus given to air transport may fill this deficiency. The internal trade is also facilitated through coastal traffic by country boats and modern steamers along the coasts. Many of the rivers connecting the interior of the country with the sea-coasts are to some extent navigable for certain seasons of the year.

Physical divisions of India. Physically India has been divided into four well-marked divisions as follows :—

1. **Mountain region of the north,** It cuts off India from the rest of Asia, and forms a three-sided barrier for the country. It covers an area of a million square miles and extends over 2,000 miles from east to west and 500 miles from north to south. The north-west portion comprises the Hindu Kush, Suleiman, and the Kirthar mountains and the south-east portion is known as the Himalayas. The former extend over a length of 750 miles and the latter over 1,250 miles.

The Himalayas exercise a dominating influence on the economic conditions of India by virtue of their favourable effect on rainfall, winds, temperature, vegetation etc. They protect India from the chilly winds of the north and check the summer monsoons from passing over them. The melting of their heavy snows serves as a permanent source of water for the rivers, which all along their land-course deposit silt and mud brought from hilly regions. The fertility of northern India depends on these rivers feeding upon the Himalayas. They also abound in animal and vegetable products—especially the forest wealth, which is of immense value to the country.

2. **The Indo-Gangetic Plain**—It is a vast sheet of alluvial plain lying between the Himalayas and the Indian Peninsula. It forms a major portion of the northern part of India. Its width varies from 150 to 300 miles. The two great river systems—of the Indus and the Ganges—coming from the snow-clad Himalaya range, water it and deposit their silt and mud along their banks, making it one of the most fertile and productive plains of the world. This accounts for its being the most densely populated part of India, containing more than 2/3rd of Indian population, while its area is only 1/3rd of the total area of the country. The rivers of this plain besides being feeders of many

irrigation works are mostly navigable, and serve as carriers of trade and commerce. The rainfall is periodic and generally occurs between May and September.

3. **Indian Peninsula or Deccan Plateau.** The low ranges of Vindhya and Satpura separate this plateau from the Indo-Gangetic plain. On its two sides are the two coastal strips called the Western and the Eastern Ghats or the Malabar and the Coromandal coasts, which stand in a great contrast to one another in matters of rainfall, climate, vegetation etc. The surface of the peninsula is generally uneven, and built of hard rocks. The rivers are not as useful as the rivers of the north. Having no snow-clad mountains as their sources, they depend mainly on the monsoons. Consequently the soil of the peninsula is not as fertile as that of the northern plain. Moreover, they have rocky beds and wild currents rendering them unnavigable except for some distance at their mouths. The rainfall is uncertain.

4. **Burma.** It stands on a marked contrast to the rest of India, from which it has been politically isolated again. It is mostly mountainous and is rich in its forest, and mineral wealth. Petroleum is its chief product. But the climate is generally unhealthy and so it is sparsely populated. The rainfall is constant and the supply of water in the rivers is always sufficient.

The soil. The Royal Commission on Agriculture in India classifies the soils of the country in four main types:—

1. *The Alluvial Soil* is the most important of all, as it is extremely fertile; though deficient in nitrates it is chemically very rich. It extends over the Punjab, United Provinces, Bengal, Sind, Rajputana, parts of Madras, Burma and Assam, and the eastern and the western Ghats.

Being easily ploughable and porous in texture this soil is capable of growing most of the *kharif* and *rabi* crops with the help of a moderate and well-distributed rainfall.

2. The famous *Black Soil* or the *Cotton Soil* is also known as the Trap Formation. This varies in character and fertility in the different areas extending over Gujarat, Kathiawar, C. P., Berar, parts of Madras.

It varies in depth according to its position, and is particularly suited to the growth of cotton. At places it is also adapted for *rabi* crops of wheat, linseed, and gram.

3. Then there are the *Red Soils*, also known as Crystalline soils. They comprise Madras, Mysore, parts of Bombay, Hyderabad, and the Central Provinces. They

are moderate in fertility and yield rice as the chief crop, wherever canal irrigation is possible.

4. Last come the *Laterite Soils*. Large parts of India from the Ganges valley to the Cape Comorin are covered with a gravelly soil called the Laterite. It is formed by the crumbling of rocks, which first heated by sun, are cooled and washed away by rain. It varies considerably in fertility.

"In the midst of these varying features one characteristic is found to be common to almost all soils, *viz.*, their comparative dryness. This absence of moisture in the land makes the artificial supply of water an absolute necessity in Indian agriculture." It has also been remarked that the "characteristic feature of Indian soil is dry, while that of British soils is wet."

Climate and Rainfall. In a predominantly agricultural country like India climatic conditions are of vital importance, as agricultural prosperity depends mainly upon a timely and well-distributed rainfall. Fluctuations in its period, quantity and distribution bring misery or prosperity to millions of people. Perhaps in no other region of the world does rainfall enter so much into every aspect of human life as in India. So is the problem of temperature, rainfall, humidity etc. As regards temperature it is impossible to make any general statement. "We may speak of the climates, but not of the climate of India. The world itself affords no greater contrast than is to be met with at one and the same time, within its limits." Himalayas are intensely cold; Kashmir is very pleasant; the Punjab becomes unbearably hot in summer; Sind and Rajputana are rainless tracts. In the Punjab the temperature has its longest range about 30° F. The peninsular area is uniformly hot, especially Malabar. In places where the seasons are a bit clearly defined, they are three in number; (i) a cool dry season, (ii) a hot dry season, and (iii) a wet season.

Further, the multiplicity of seasons in India has necessarily shortened the two main seasons, the winter season, and the rainy season. But this is generally not favourable to vegetable growth, and results in the quantitative as well as qualitative inferiority of Indian agricultural products.

As regards rainfall, India lies in the monsoon region of Asia divided into two distinct periods; that of the summer monsoons and that of the winter monsoons. The former are south-west, and the latter north-east in their direction. But rainfall in India is unevenly distributed throughout the country and throughout the year, and is generally uncertain and untimely. There are portions of the country

which suffer as much from excessive rainfall as others do from draught. Places like Chirapunji get about 500 inches in a year, while in Sind it may never be even two inches. The most marked of all these peculiarities is its discontinuity. Keeping in view this lack of uniformity we may divide India into the following parts as regards rainfall :—

1. Areas of almost unfailing rainfall—Burma, Assam, East and South Bengal, Western Ghats etc.

2. Areas of rainfall from 10 inches to 30 inches—Bombay, parts of the Deccan, Udaipur etc.

3. Areas of very little rainfall, where methods of artificial irrigation are a necessity—parts of the Punjab, Rajputana etc.

This inequality and lack of uniformity depends upon such geographical factors as physical situation, height above sea level, temperature, nearness to sea and mountains. Places governed by different factors have different characteristics in respect of rainfall.

One marked feature of this diversity of climatic conditions in India has been a diversity in her economic life. "Each season in succession affects in diverse modes the different portions of the country; one province may sometimes be devastated by flood while another is parched with draught, and each of them has its own rotation of crops."

On the whole the Indian climate may be described as semi-tropical; consequently its effects on the human constitution is not favourable, and is in a direct contrast to that of the climate of the temperate zone, *e. g.*, that of England. The depressing effect is the cause of a relatively low tone of health and physique of the Indian masses resulting in an inferior efficiency of the Indian labourer, when compared to that of the European one. The Indian climate "has made the Indian character intuitive without being inquisitive. As a people Indians are lacking in self-confidence and the dash and audacity that are necessary for and ensure success. They want in effective action and decision."

According to the general periodicity of the monsoon in India—winter and summer monsoons—there are two general sowing and harvesting seasons here, resulting in the production of two sets of crops. The one sown in June and reaped in September is called the *kharif* crop, and includes rice, cotton, bajra etc. The other sown at the end of the summer monsoons and reaped in spring is the *Rabi* crop and includes wheat, barley, linseed etc.

Vegetable Products. India produces a large variety of vegetable products also called the Agricultural Products, belonging to sub-tropical and temperate zones. The extensiveness of the country, differences in elevation, wide range of latitude, climate, soil, and rainfall—upon these factors depends the relative cultivation of different crops in different areas.

They may be classified as follows :—

1. **Rice.** Rice is the principal crop of India. It is not only the staple food of most of the Indian population, especially of the eastern provinces including Burma, but India is also the largest exporter of rice in the world. It is grown extensively throughout the country and occupies about 30% of the total cultivated area. It was 81.45 million acres in 1935-36 yielding 27.71 million tons. It is chiefly cultivated in Bengal, Behar, Orrissa, Burma, Madras, United Provinces, Central Provinces, Assam, and Bombay. Of these provinces, Burma trade represents 38% of the total Indian export or about 50% of the total production in Burma. It is because of the fact that the ratio of acreage-under rice to population is very high there. The rice is exported for the purposes of (1) preparation of starch, (2) brewing wine, spirits, and alcohol (3) purposes of human and animal food. The problems connected with the cultivation of rice are so complex and varied that little progress has so far been made with this crop by the Agricultural Departments. However, the present area under the improved varieties distributed by the Department exceeds one million acres.

2. **Wheat.** Wheat is next in importance to rice as an article of food specially in the Punjab, United Provinces, N. W. F. P. Elsewhere it is grown mainly for export. It covers about 10.3% of the total sown area; *i. e.*, 36.06 million acres. Wheat cultivation has received a very effective stimulus from improved transport and irrigational facilities of the Punjab. Improvements in the quality of wheat are being introduced by the Agricultural Department and the area under cultivation of improved varieties though extensive, is but a small portion of the total area under wheat. As regards world production, India occupies the third place and produces about 1/10th of the world's wheat. A few years back India held a very prominent place in the world export but other countries have now adopted improved methods of cultivation resulting in the gradual fall of India's share in the world export. Moreover, India has, of late, been showing signs of becoming a wheat importing country in future. To check this

foreign import and to encourage home production, the Government of India passed the Wheat Import Duty Act in 1931 which levied an import duty of forty rupees per ton on foreign wheat. The Government of India lifted the Import Duty on wheat with effect from April, 1937, with the result that Australian wheat began to be imported in India and prices of wheat in India came down.

3. **Barley.** Barley is used as food both for man and cattle and in India it is grown chiefly in U. P., and Behar covering 25 per cent. of the total area. There is only a small export because the internal demand is very great.

4. **Maize.** Maize is chiefly grown in Bihar, U. P., and the Punjab, and N. W. F. P. It is used both for human consumption and as a fodder for animals. 23 per cent. of the total area sown is occupied by this crop. It is not an important article of foreign export.

5. **Millets.** There are two varieties of Indian Millets, Jowar and Bajra, and are grown extensively all over the country. These constitute food for those who cannot afford to consume wheat or rice—especially for the masses of Madras, Bombay and the adjoining Districts of Hyderabad. They are also used as fodder for the cattle. There is no considerable export of either of the millets. Both account for 13 per cent. of the total sown area.

6. **Pulses.** Like millets, pulses are grown throughout India, and form an important part of the diet of the people all over the country. They are chiefly grown in U. P., Punjab, Bombay, C. P., Bengal. Gram is the most important of all and occupies 62 per cent. of the total area. On account of the large internal demand, exports of pulses are comparatively limited.

7. **Sugar Cane.** India was probably the original home of sugar cane and the area of sugar is larger than in any other country in the world. But the average yield per acre is so low, and the demand from a population that is largely vegetarian is so great, that the country until recently depended to an increasing extent upon imports of cheap foreign sugar. Though India has got half the world's acreage of sugar cane, the output is less than half. Experiments are, however, being carried on to improve yield per acre. The Indian soil is admissibly adapted to its cultivation. The United Provinces with an average over 2,249,000 acres (1935-36) under sugar cane accounts for 54 per cent. of the total production of India. The second place is occupied by Bihar and Orissa. Sugar cane is also cultivated in smaller quantity in all provinces.

In sugar production India fails to compete with other countries because of the following facts:—

1. Cultivation of sugar-cane on unscientific lines.
2. Defective method of extracting juice.
3. Great waste in refining.
4. The poor out-turn of molasses.
5. Difficulties in the way of concentrating cultivation round central factories owing to fragmentation and subdivision of holdings.
6. Small recovery of refined sugar from Indian Gur.

In recent years the Imperial Council of Agricultural Research has been doing good work to spread improved varieties of cane among the cultivators. The total amount of grant made to the Imperial Council for expenditure on Agricultural Research on Sugar up till now amounts to Rs. 35 lakhs. Skillful research work is calculated to increase the percentage of recovery of sugar in Indian factories. The cultivator of sugar-cane has been benefited by means of the efforts in various provinces to fix a minimum price of sugar cane. The utilisation of molasses for making spirits will further strengthen the sugar industry.

It was in 1932 by the passing of Sugar Industry Protection Act that a great stimulus was given to the production of Sugar in India by modern methods, and a check was placed against the import of foreign sugar. Even upto now large quantities of sugar are manufactured in India both by the indigenous open-pan process, and by refining gur. Gur is also being prepared for direct consumption. For the season 1934-35 it was estimated that area under cane was 3,471,000 acres and the gross production in terms of gur was 5,085,000 tons. The number of modern factories crushing cane in 1928-29 was 24 and in 1934-35 it went upto 142. To levy an excise duty on the manufacture of sugar an Act was passed in 1934. The aim was to check the mushroom growth of new sugar factories in India. It is estimated that in the very near future India will become self-supporting in sugar.

8. **Other food crops.** These include fruit, vegetables, condiments and spices accounting for a total area of 8.10 million acres in 1933-34. India grows a variety of these crops. The fruit cultivation has not considerably developed in India because of the general poverty of the masses, and the dearness of the fruit owing to the shortage of supply. There may be a considerable extension of the area under these crops if irrigation is more developed

in conjunction with facilities provided for transport, careful picking and packing and cold storage provisions for vegetables and fruit. The Agricultural Department, has not, on the whole, done much in increasing their supply. In the Peshawar valley some success has been achieved by paying a systematic attention to fruit culture. There is still much wider scope for development in this direction.

Condiments and spices (peppers, chilies, ginger, cardamom, betel-nut, cinnamon, and cloves) are chiefly grown in the extreme south of India, though certain varieties are cultivated everywhere. Part of it is also exported to foreign countries.

NON-FOOD CROPS.

1. **Coffee.** The origin of coffee plantation in India is not exactly known, but its systematic cultivation dates from the year 1830. Since then coffee cultivation in India has passed through many vicissitudes, and even at present it seems to be a declining industry, as cheaper brands are superseding it in the foreign markets. It accounts for about 155,000 acres, and is chiefly confined to Mysore, Coorg and Madras.

2. **Tea.** Tea is one of the principal beverages in many countries of the world, and India holds a very prominent place in the matter of its cultivation, both for local consumption and external demand. With the exception of China, India is the largest tea-producing country in the world. It was in the latter part of the 18th century that efforts were made to cultivate tea in India after bringing seeds from China, but soon after the plant was discovered in Assam, where government started plantations but as the industry began to prosper soon, government's connection with it ceased, and since then the cultivation depended entirely upon private European business firms.

More than half the area covered by it is confined to Assam; other areas being Darjeeling, Dehra Dun, Kangra, Nilgiris, Travancore and Cochin. A rapid increase in internal consumption and foreign exports led to the extension of its area and production. In 1933 it was 816,000 acres producing 383·26 million lbs.

Two associations, The Indian Tea Association, and The United Planters' Association, are concerned with the problems of tea cultivation and the creation of an extensive demand in India and outside.

3. **Cotton.** Cotton is the premier fibre crop of India, and its cultivation has been considerably increasing for the

last few years in certain tracts, even at the cost of food crops. This is because of the price it fetches on account of the large foreign demand and the commercialization of agriculture in India. As much as 70 % or more of the total output is sent out. Japan, the United Kingdom and other European countries are the chief consumers of Indian cotton, Japan being our biggest customer. It is significant that Lancashire has now begun to consume more Indian cotton, and the Mody-Lees Pact of 1933 was devised to popularise and promote the use of our cotton in the United Kingdom. "The only comment we need make here relates to the necessity of devising measures for the use of the improved varieties of cotton in the country itself with a view to lessening our dependence on foreign cloth. In spite of her large supply of raw cotton, India has at present to look to other countries for about $\frac{1}{3}$ of her total need for cloth."

The provinces which chiefly grow cotton are Bombay (6·3 million acres), the Central Provinces and Berar (4·2), Hyderabad (3·7), the Punjab (3·0), Central India States (1·1), and Madras (2·2). The figures are for 1933-34. The black soil of the Deccan is best suited to its growth, and so are the Bombay Presidency and Berar the most important cotton growing areas. As regards the area under cotton and its total out-turn, India stands next to the United States of America. In 1933-34 the estimated area was 23,925,000 acres, and the total yield was 5·00 million bales of 400 lbs each.

The main defects of its cultivation in India are the low yield per acre, and the shortness and coarseness of its lint which renders it poorer in spinning value and unsuitable for the manufacture of superior cloth. The better varieties—Egyptian and Upland American—have been recently introduced in some parts of the country, especially in Sind, where cotton cultivation has been given a strong stimulus by the provision of latest irrigational facilities through the completion of Sukkur Barrage Canals.

It was in 1917 that a committee was appointed by the Government of India to examine the possibilities of increasing the supply of long staple cotton in India, to suggest improvements in the existing methods of ginning and marketing, and to make recommendations in regard to the prevention of adulteration, damping, and mixing etc. The committee, after two years' study of the problems made its recommendations in the directions required under two main heads, *viz.*, agricultural and commercial, and since then many steps have been taken to that

effect as to improve the output of Indian cotton in quality as well as quantity.

4. **Jute.** India enjoys the world's monopoly of jute supply. This crop stands next to cotton in importance. The area under it has considerably increased during the last 50 years with a corresponding rise in the yield of fibre. But for the last few years the acreage has been going down to some extent owing to the severe slump in prices and the depression in the jute manufacturing industry, along with a decline in the export trade.

The area in and about the Ganges-Brahmaputra Delta comprising Bengal Assam, Cooch Behar, and Orissa, is best suited for its growth, as the soil there is continuously enriched by the alluvial deposits of the two rivers without any expenditure on manures. Cultivation has also been extended to Nepal, United Provinces and Madras to some extent.

The total area in 1934 was 2,497,000 acres, 748,000 tons out of the yield having been exported in raw form. Germany and the United Kingdom are the principal customers of India's raw jute, other importing countries being Spain, France, Japan, China, the United States, Italy and Belgium.

5. **Oil Seeds.** In India we have a vast variety of oil seeds such as *aiwan*, castor, coconut, coriander, cotton seed, cummin, groundnut, *kardi*, linseed, *mowra*, niger, rape and mustard, and sesamum. They cover an area of 17.79 million acres (in 1933-34) producing about 3½ million tons. A large quantity is exported annually, but the recent export figures show a marked decline. In 1933-34 the exports amounted to 875,000 tons. The proportion of the exports to total production varies considerably with different seeds. Many economists hold that India does not make the best use of her oil seed resources. The seeds to a large extent are pressed in India, the refuse or cake being used as cattle food or as manure. But their exports are so large that the proportion of exports to production lies between 30 and 50 per cent. We export seeds and then import oils at high prices. The transaction is disadvantageous both from a pecuniary point of view, as also from an agricultural standpoint. As the result of their exports, we not only have to import oils at high prices but also lose the oil cakes, the by-product, which can be utilised as manures. It is said that exports of oil seeds amount to an exportation of the fertility of the soil.

Following are some of the details about the principal oil seeds :—

(i) *Groundnut*. The cultivation of groundnut, one of the most important of our oil seeds, has been showing a remarkable increase for the last few years. It has been gaining importance in some of the provinces and is competing even with cotton. In 1933-34 the area under it was 8'06 million acres as compared with 1'40 million acres in 1918-19. Madras, Bombay, and Hyderabad mainly grow it. About three fourths of the total produce is retained for internal demand, and the rest is exported.

(ii) *Linseed* is cultivated for its seed and not for its fibre, and is mainly exported, both the seed as well as the oil and the cake. It is chiefly grown in Central Provinces, Bihar, Orissa, United Provinces, Bombay and Bengal. Total area in 1933-34 was 3'26 million acres.

(iii) *Rape and Mustard seeds* are chiefly grown in the United Provinces, Bihar, Orissa, Bengal, Punjab, Assam, and Bombay, and account for 6'07 million acres. Their export figures have been considerably falling and from 20% average of pre-War days they have come down to 4% in 1934-35.

(iv) *Sesamum* accounts for 6'22 million acres according to 1933-34 figures, and is cultivated practically all over India. The British Empire produces about half of the world's supply and India's share is again as much as half of it. Its exports also have been going down for the last few years.

6. **Indigo**. The total area under indigo in 1933-34 was only 41,900 acres, the principal places growing it being Madras, United Provinces, Bihar, Orissa, Bombay and Bengal. From the point of view of foreign trade Bihar is the most important of all these places, as it is here that the dye is systematically extracted and marked under European supervision, and the bulk of Bihar's product is consequently exported.

As regards its importance in the world trade India has enjoyed a highly chequered history. With the coming of the Europeans in India the industry began to flourish first under the Portuguese and then under the British hands. It was for some time ousted by the West Indians, but again regained its position and continued to flourish till the Germans brought in the market its synthetic indigo manufactured in their laboratories. Since then India's share in the production and her exports have considerably gone down. A temporary and partial recovery was made

during the war, but after the close of the war set-back has again set in.

Opinions differ about the future prospects of the industry but progress it is suggested, lies in cheaper production both in cultivation and in manufacture.

7. **Rubber.** India's share in the total world production of rubber is only about three per cent. Total area in 1933 was 177,100 acres with a yield of fourteen million lbs of raw rubber. It is mainly grown in southern India. Most of the rubber grown is exported. In 1934-35 23.6 million lbs valued at Rs. 65.43 lakhs were exported and the value of imports of rubber manufactures amounted to Rs. 206 laks.

8. **Tobacco.** Tobacco is not believed to be an indigenous plant. It was probably brought to India by the Portuguese in the 17th century. At present there are three chief tobacco centres namely, (i) Bengal (ii) Southern India, (iii) Lower Burma. In 1933-34 the total area reported under tobacco was 1,183,000 acres distributed mainly over Madras, Bengal, Bihar, Orissa, Bombay, Burma, United Provinces and the Punjab. Although there is a considerable local consumption in India, yet a good quantity is also exported, chiefly from Madras and Rangoon. But the value of the imports of manufactured tobacco has always exceeded that of the exports mainly owing to the increase in the imports of cigarettes. The recommendations of the Agricultural Research Institute and the heavier import duties are calculated to stimulate the cultivation and consumption of the local produce.

9. **Opium.** The cultivation of the poppy plant, producing opium, is carried on under a system of licenses issued by the government of India. The area under opium has been gradually decreasing as almost the whole of exports have dwindled down to nothing and the internal consumption has also been controlled. Now its cultivation is mainly confined to the United Provinces, (15,952 acres), and only 644 chests or 825 tons were exported in 1934-35.

10. **Cinchona.** It is chiefly grown in the Nilgiri hills and Darjeeling on the government Cinchona plantations. Madras also has some private plantations. The plant was introduced in India to secure a cheap and abundant supply of quinine for the people of India, but while the exports of cinchona barks have decreased to a great extent, the imports of quinine have risen from 43,000 to 125,000 lbs.

11. **Fodder Crops.** The problem of growing fodder crops is a very significant one for a country like India

in view of the large number of cattle that must be maintained in a state of efficiency for agricultural production. The Agricultural Department has in recent years adopted many measures in this connexion. In 1933-34 area under fodder crops was 10·21 million acres, the Punjab and Bombay being the chief contributors.

FOREST WEALTH OF INDIA.

"Among the most valuable natural resources of India must be reckoned her magnificent forests," which constitute a great national asset and are of an enormous utility, both directly and indirectly, in the economy of man and nature.

Their direct utility is chiefly due to their produce, and the supply of raw materials for the various manufacturing industries, which gives rise to the development of many indigenous industries helping in giving employment to a large number of people. Another use is the provision afforded by the pastures for the grazing of cattle. Among the indirect uses we may note the following. Forests have a great effect on the water supply and the climate of the country, rendering it more temperate, increasing the relative humidity of atmosphere, reducing evaporation and increasing the precipitation of moisture. They also help in reducing the loss done by floods and avalanches. Many streams and springs providing a constant supply of water have their source in forest areas. They increase the fertility of the soil, and under certain conditions may even have a healthy effect on the climate of a country.

Despite this great utility man has always proved to be a destructive force against the growth and reproduction of forests. It is believed that if left to himself without hindrance in his destruction, it would have been difficult to preserve the forest wealth of a country from his hands. Although forests are supposed to reproduce themselves quite rapidly yet, they can hardly keep pace with man's destructiveness. So arose the necessity of state interference into the important problem of controlling the forest areas.

Similar was the case in India. As it was before the establishment of the British Rule, so it was during the earlier period of its establishment that the destruction of forests in India went on on a fairly increasing speed. The Government on realising the danger ahead, had to organise a state department, later on known as the Indian Forest Department to keep a control over India's forest wealth.

The present total area under the control of the department is 261,000 square miles (an area more than twice that

of the British Isles and nearly 24% of the whole British India). Throughout this vast area, scattered over the length and breadth of India from the Himalayan snows to Cape Comorin and from the arid tracts of Baluchistan to the eastern limits of the Shan states, there is, as may be imagined, an infinite variety in the types of forest vegetation depending on variations of climates and soils and other local factors. Broadly speaking the following main types of forests may be distinguished :—

1. Arid country forests, found in dry tracts where rainfall is below 20" as in Sindh, Rajputana, Baluchistan, and the Punjab.

2. Deciduous forests found in large areas in Sub-Himalayan tracts, Peninsula of India and Burma.

3. Everygreen forests, found in regions of heavy rainfall, *e.g.*, in Western Ghats, and eastern sub-Himalayan tract.

4. Hilly forests, wherein vegetation varies according to elevation and the quantity of rainfall. They are met with in Eastern Himalayas, Assam, Burma, Khasia, and North Western Himalayas.

5. Littoral forests found on sea coasts and tidal creeks, which are occasionally inundated by high tides.

For purposes of state control and management the total forest areas have been classified as Reserved, Protected and Unclassed State forests.

"In the reserved forests rights of user in favour of individuals and the public are carefully recorded and limited at settlement while the boundaries are defined and demarcated ; in the protected forests the record-of-rights is not so complete, the accrual of rights after settlement not being prohibited, and the boundaries are not always demarcated ; while in the unclassified forests no systematic management is attempted and, as a rule, the control amounts to nothing more than collection of revenue until the areas are taken up for cultivation or are converted into reserved or protected forests."

For purposes of conservation, and their relative importance and utility, four types of forests have been recognised in the general forest policy of the government but the following types are not always clearly and sharply divided:—

- (1) Forests which are necessary to be preserved for climatic or physical reasons, as their influence on the storage of the rainfall or the prevention of soil erosion and sudden floods.

(2) Forests which supply timber, *e.g.*, teak, sal, deodar, pine.

(3) Minor forests which provide for the production of wood, fodder, grazing or other produce for local consumption.

(4) Forest lands which supply grazing pastures.

Forest Products are mainly of two kinds, (i) major and (ii) minor. In the first class are included such things as timber and fire wood, while second type consists of all other products as lac, tanning materials, turpentine and resin. The minor products have been gradually gaining importance and recognition in the world markets. Research work has also shown the utility of bamboo fibres for the manufacture of paper pulp, which may lead to a sufficient production of paper for our home consumption. Government have recently granted protection to the newly rising Indian bamboo paper-pulp industry.

Forest Industries. The important role which the forests of a country play in its general commercial welfare and in providing employment to its population is not always fully recognized. The Indian forests also play an important role as suppliers of the necessary raw materials for various industries providing employment for a large number of her people. There is, for example, a considerable jungle population deriving sustenance directly from the products of the forests. Then there are large numbers of wood cutters, sawyers, carters, carriers, raftsmen, etc., working in and near the forests. Lastly there are those engaged in working up the raw products as carpenters, wheel-wrights, boat-builders, rope-makers, tanners, lac-manufacturers etc.

Government Administration. The general policy of the government of India regarding Indian forests was laid down in 1894 by the classifications of the areas under the control of the Department of Forests into four broad classes, which have already been noted. Besides these affairs of control, classification and preservation of forests, the Government of India have also established a Forest Research Institute at Dehra Dun, where valuable investigation and research works are carried on which lead to the fuller and better utilization of the raw products yielded by Indian forests.

MINERAL PRODUCTION.

The importance of minerals in the economic development of a country, and especially in the present age, cannot be exaggerated.

Geological structure among other factors determines the location, variety, quality and quantity of minerals in a

country, and India, because of different kinds of earth's strata and substrata, has a variety of them. On comparing her output, however, with that of some of the more important mineral producing countries of the world, we see that the quality and quantity of Indian minerals are neither superior nor abundant. India produces only a paltry one per cent. of the world's production of iron, and only 2 % of coal, 7 % of lead, 3 % of gold, and less than one per cent. of petroleum. Still one should know that the mineral resources of India are by no means small for her own self, as in the opinion of the Indian Industrial Commission (1918), the mineral deposits of India are sufficient to maintain most of her key industries. Not many years ago only about fifty or sixty years before—the common idea was that India's mineral wealth was meagre, as practically nothing had been done in the field of experimental development of Indian minerals, and therefore no definite idea could be formed regarding India's potentialities in this matter. Later investigations and discoveries resulted in the opening up of vast deposits of coal, iron, petroleum etc. Although the present quantity available cannot be called as unlimited or unparalleled, it is, by no means, negligible, and there has arisen a vast scope for the development of a number of metallurgical industries in the country as a result of the striking progress achieved in mineral production. The following table will give an idea about the quantity and quality of some of the chief minerals India produces :—

	Quantity 1914.	Value in rupees	Quantity 1931	Value in rupees
1. Petroleum	259,342,710 gallons	2,41,05,892	305,018,751	5,91,35,250
2. Coal ...	16,464,263 tons	5,86,10,695	21,716,435	8,26,98,364
3. Salt ...	1,348,225 tons	72,49,347	1,839,400	1,36,40,959
4. Manganese	682,898 tons	1,31,58,965	537,844	98,13,879
5. Gold ...	607,388 ounces	3,50,75,330	330,488	2,08,01,943
6. Iron ore	441,574 tons	5,44,740	1,624,883	41,58,737
7. Silver ...	236,446 ounces	4,03,460	5,923,005	52,29,234
8. Mica ...	40,506 cwts.	13,21,351	38,963	20,37,631
9. Lead ...	10,548 tons	30,34,185	74,785	1,28,88,270

We now proceed to give a brief description of some of the Indian minerals exploited on a commercial basis.

1. **Coal.** " It is one of the most important industries, one in which the public can never afford to take a mere lukewarm interest. First, the welfare of the industry

is of vital importance to Bengal, Bihar and Orissa. Secondly, coal is by every criterion a key industry.....Our vast railway system would be unworkable without a well-worked coal industry. So would a coastal marine be when it is evolved by our nationals." The necessity of coal conservation in India is supreme. Coking coal should be conserved for its proper purpose *i. e.*, smelting of iron. Steam coal and other kinds of coal should alone be used for railways and other uses.

In the British Empire India occupies the second position in coal productions, the United Kingdom being at the top. The provinces of Bengal, Bihar and Orissa mainly account for the Indian output—about 85 % of the whole. Besides these Hyderabad, Central Provinces, Burma, Assam, Punjab and Baluchistan also have coal mines. Indian coal is thus geographically very unevenly distributed, the two important places of Madras and Bombay being in a great difficulty about coal-supplies. It may be noticed that the opening up of coal mining in India got a stimulus from the construction of railways, which at once created a large demand for coal.

The industry has been expanding remarkably since then, and a special progress was made during the war period, but the later imports of coal from South Africa became a cause of a good deal of anxiety. The government appointed The Indian Coal Committee which inquired into the problems relating to the strengthening of position of the Indian coal industry and to the stimulating of exports of Indian coal from Calcutta to Indian and foreign ports. The committee made recommendations to this effect, which were put into operation by the Government.

The recent figures in respect of exports and imports and of local consumption show that while industrial progress seems to have been fairly and generally maintained, there has not been much improvement in conditions in the coal industry and that the principal support of the industry is the growing market for coal in the country itself.

2. **Iron.** Next to coal the chief mineral is iron. It is found in Bihar, Orissa and Central Provinces. In Mysore also are found some iron ore deposits. The knowledge of these Indian ores is not a modern discovery, but it has been of a very great antiquity, and the high quality of the native made iron in the past gave India a prominent position in the metallurgical world. The presence of coal in the same or an adjoining place is highly helpful in the exploitation of iron deposits. The present rate of progress, if mani-

tained, will in course of time make India independent of foreign supplies of iron.

3. **Gold.** India stands eighth in the list of gold producing countries of the world. The Kolar fields in Mysore are the chief gold mines in India, contributing nearly 95 % of the total Indian output. The rest of it comes from Anantpur fields in Madras and Hutti mines in Hyderabad (Deccan). An insignificant quantity is also derived by washing in the Punjab, Central Provinces and the United Provinces. The high price of gold has given some stimulus to gold production in recent years.

4. **Petroleum.** Indian production of petroleum represents only a small and gradually decreasing percentage of the total world production which has been increasing very rapidly. India has only two oil producing areas. The most important and the most successful one is the area consisting of Burma and Assam, which contributes more than $\frac{9}{10}$ that of the total output. The other area includes Punjab and Baluchistan. The internal demand has been so great and has been so rapidly increasing for some years that the exports have practically ceased and there have been increased imports of petroleum and its products.

It is estimated that whereas there has been a little fall in Burma's share of output, the increase in the production in Assam has compensated it.

5. **Salt.** Salt is produced in India through many sources. The system of evaporating sea-water on the coasts of Bombay, Madras and Burma is the chief source, supplying about 60% of the total Indian production. The remaining three sources are :—

- (i) Salt Mines of Khewra (Punjab).
- (ii) Brine salt from Sambhar Lake (Rajputana).
- (iii) Salt brine condensed on the border of the lesser Rann of Cutch.

But the total Indian output falls short of country's demand by $\frac{1}{4}$ and to meet this salt is imported from Aden, the United Kingdom, East Africa etc. In view of the serious fall in the price of imported salt the government in 1931 levied duty of -/4/6 per maund on salt imported from all countries except Aden.

6. **Manganese.** The areas producing manganese in India are Central Provinces, Madras, Bombay and Mysore. The industry was first started in Madras but after some-time Central Provinces began to yield greater amount of manganese, thus occupying the first place.

Manganese is a mineral of high utility in the manufacture of steel, and some other industries and the three principal iron and steel works of India consume a sufficient quantity of the Indian output.

The rest is exported to foreign countries, and there have been many considerable fluctuations in the exports of Indian manganese because of Russia's improved methods of exploitation and finance and the development of South African deposits. Recently there has been some recovery in this direction.

7. **Silver.** India is regarded as the largest consumer of silver in the world, but her output of the mineral is very negligible and insignificant. Moreover it has been only since 1909 that silver production began in India, chiefly in the Bawdwin mines of Upper Burma.

8. **Lead.** The Bawdwin mines also yield a substantial quantity of lead. Although the present output is not much, it is expected that a more extensive development of the industry will give India a place of pride in the production of lead in the whole world.

9. **Mica.** India has been for many years the leading country in the matter of producing Mica. More than $\frac{3}{4}$ ths of the world's total output is got from this country. Bihar, Madras, Travancore are the chief areas producing Mica. The importance of the mineral lies in its use in the electrical industry and in connection with the developments of wireless telegraphy, aeronautics and motor transport.

10. **Quartz and Felspar.** These are waste products in mica mining, both these minerals are used in glass and pottery industries.

11. **Aluminium or Bauxite.** This ore occurs in the Balaghat District in Central Provinces. At present the ore is exported to Europe and Japan at low rates but with proper efforts can be basis of a flourishing aluminium industry in the C. P.

12. **Limestone and Gypsum.** They are the two main constituents of Portland Cement, found around Dehradun, Hardwar, Rishikesh in the U. P.

Other minerals and precious stones produced in India are zinc, tin, saltpetre wolfram, copper, jade, chromite, potash, amber, diamonds, rubies and sulphur. Monozite deposits were recently discovered in Travancore, while building stone, magnesia, chalk and lime-stone are also available. The famous 'Portland' cement made at Wah

(Punjab), Katni, Jubbulpore, Gwalior and Dwarka is supposed to be as good as the best English cement.

13. Minerals as a Source of Revenue. "If the industries connected with various minerals are established in the Provinces, the Governments can expect to get more money in the shape of Royalty than what they are getting at present. If the Governments give all the technical help and guidance, necessary in the beginning towards the establishment of the various industries, to their business man, they can claim some percentage of profits from every industry. Governments can also start some of the important industries themselves."

ANIMAL RESOURCES.

"There is hardly any need for emphasizing the importance of animal life to an agricultural country like India. The variety of Indian conditions has naturally developed a great variety of animal life and the number of animal species found in India is much greater than that in Europe. The cow and the buffalo are mainly prized for supplying milk. The bullock plays an important part in the agricultural economy as a draught animal. The use of horses or mechanical power being practically unknown. Animals used in agricultural operations, as well as goats and sheep, contribute practically all the manure used by the Indian cultivator, the use of artificial manure being as yet in its infancy. The humble donkey is ubiquitous, and is used as a pack-animal everywhere. The camel is found in the sandy parts of the country and is used for purposes of transport across deserts. Fish is of immense importance, especially in provinces like Bengal, Assam, and the coastal strips of the Peninsula, where it supplies the people with the nitrogenous elements in their diet, elsewhere obtained by the use of pulses. The Indian seas contain many varieties of edible fish, but these resources still await properly organised exploitations along modern lines."

"The extensive forests of India shelter a large variety of wild animals and birds and provide excellent game for the hunter."

SOURCES OF POWER.

India is severely handicapped in comparison with many other countries of the world in the matter of developing her industrial activity as the scope for the supply of cheap and convenient motive power for her industries has not yet been fully realized because of some unfavourable circumstances.

The principal power resources available in the country are coal, wood-fuel, oil and water. Coal constitutes the chief, rather the only, source of power for the railways all over the country, and as regards its use for other industries, it becomes difficult and costly to transport it to all parts of the country. There has also been imports of cheaper coal from East Africa for the last few years. So is also the case with India's production of oil (petroleum), where again the high cost of transport stands in the way of its popularising as a source of motive power. It may be used cheaply by those parts of the country only where it is chiefly produced. There has been sounded, on the other hand, a warning that India should carefully economise her use of petroleum and its products rather than following a policy of the rapid exploitation. As regards the use of wood-fuel it is again highly doubtful if it will be both easy and less expensive in using it as a source of generative power. The Industrial Commission have suggested the method of wood distillation in this connection.

There thus remains only one source of power—water-power—which seems to possess bright prospects. In the first instance it was found that "water-power schemes, pure and simple, are generally difficult in India," because of the seasonal character of the rainfall, making the provision of storage works a costly affair. But the Industrial Commission emphasized the necessity for a hydro-electric survey of the country for utilising water to generate a new, cheap and efficient source of electric power. Many provincial governments and some Indian states consequently undertook the necessary investigations and before the organizations of transmitting electric power thus produced over long distances only small hydro-electric works were set-up over different parts of the country.

Within recent times more and more attention has been paid to large schemes with the result that many major works have been built in different provinces by the governments, states, as well as by private companies supplying cheap electric power to large surrounding areas. Besides others, the more important of these are :—

1. The Lonavla Project of the Tata Hydro-Electric Supply Company Limited situated at Lonavla above the Bhore Ghat (Bombay). The Company supplies power to mills, railways, tramways, and municipal bodies for city-lighting purposes.

2. The Andhra Valley Power Supply Company supplies power to about thirty factories in Bombay and to the G. I. P. Railway.

3. The Mandi Hydro-Electric Project of the Punjab Government. The scheme has been undertaken to supply cheap electricity to most of the towns and villages from Lyallpur to Ferozepur, and to such industries as pressing of oil-seeds, sugar-manufacture, cotton and woollen manufactures etc. etc. It will also enable the agriculturists to irrigate their lands by means of tube-wells a large area of uplands where canal water cannot reach. Some success has been achieved in this connection, and it is hoped that with further extension of their works, the industrial activity of the province shall receive a powerful impetus. To help this scheme a railway line has also been constructed from Pathankot to Jogindra Nagar, a distance of one hundred miles.

4. The Hydro-electric Project of the U. P. will develop all the power available in the falls of the Upper Ganges Canal. The power generated will be available for domestic, industrial and agricultural purposes. The total power available is 34,000 K. W.

5. The Government of the North-West Frontier Province has commenced the construction of an hydro-electric power station on the Upper Swat Canal which is known as the Malakand Hydro-electric Project. The scheme when fully developed will be capable of a continuous output of 20,000 K. W.

6. The Province of Madras has been divided into nine power areas *viz.* Mettur, Madras, Ananthapur, Periyar, Papanasam, Pykara, Vizagapatam, Bezwada and Chattipat. The creation of the South Indian Grid will connect up the Madras, Pykara, Mettur, Periyar and the Papanasam Power Stations.

Hydro-electric developments are also taking place in important Indian states such as Mysore, Travancore etc.

SUMMARY

The physical position, geographical features, and environments combined with the natural resources of the country have a direct bearing upon the economic prosperity of any country. The case of India is peculiar in this respect. It is called a rich country inhabited by the poor. Being very vast, sometimes called a sub-continent, it occupies a very favourable position commanding land, sea and air routes to all parts of the world. Its own means of communication are well developed and utilised; the limited number of its harbours being the chief drawback. Some rivers are also navigable.

Physically it has been divided into four well-marked divisions out of which Burma has since the 1935 Government of India Act been separated. The other three are :—

1. The Mountain region of the north, stretching from east to west.
2. The Indo-Gangetic Plain, the most fertile part of the country.
3. The Deccan Plateau with its two contrasting coastal strips.

The soils have been classified as the alluvial, the black cotton, the red, and the laterite soils. As a whole the Indian soil is described as dry as opposed to the English wet soil.

Climatic conditions are of a vital importance for an agricultural country like India as its economic progress and prosperity is closely bound with it. Its general characteristic features are indefiniteness and multiplicity of seasons with more or less unevenly distributed rainfall. This diversity leads to a diversity in country's economic life. Although situated in the famous monsoon region of Asia the climate is described as semi-tropical having a relatively worse effect on the health, physique, and efficiency of the Indian people. Because of the double periodicity of rainfall there are two principal sowing and reaping seasons, the *Rabi* (summer) and the *Kharif* (winter).

On its vastness and the various climatic divisions, depends the production of a large variety of vegetable products. They are rice, wheat, barley, maize, millets, pulses, sugar, miscellaneous fruits, vegetables, condiments and spices. The non-food crops include coffee, tea, cotton, jute, oil-seeds, indigo, rubber, tobacco, opium, cinchona and fodder crops. The magnificent forest wealth is another national asset of an enormous utility. The forests provide for the various manufacturing industries and cattle grazing pastures besides having a healthy influence on the water-supply and climatic conditions. The total area covered by them is 261,000 square miles consisting of an infinite variety in the types of forest vegetation, which are generally classified into five main classes. For purposes of conservation they are divided into four classes, keeping in view their relative importance. Forest products include the major products as timber and fire-wood and minor as lac, tanning materials, turpentine and resin. For purposes of research a government institute has been established at Dehra Dun.

In respect of mineral production India stands at a lower level in comparison with some of the mineral-producing countries of the world. Still it has a variety of them and the gradual and continuous development of its metallurgical industries is going on. The chief minerals are petroleum, coal, salt, manganese, gold, iron, silver, mica and lead.

The animal resources are naturally well developed because of the agricultural and other requirements. The special significance attached to the cow is traditional.

In the matter of the sources of motive power for Industries India is still poor. The principal resources are coal, wood-fuel, oil, and water out of which coal occupies the most prominent place, water coming next. The various difficulties are connected with her coal and other power leading to continuous efforts being made for a development of the hydro-electric works over different areas.

QUESTIONS ON CHAPTER II

1. Is it necessary to study the main features of Indian geography as a preliminary to the study of Indian economic problems?
2. "Natural conditions exercise considerable influence on the methods and the volume of wealth production." Explain this remark, and show how it applies to the economic organisation of India. (P. U. 1929)
3. Why has India got only a few harbours? What is the economic significance of this deficiency?
4. Write a note on the present means of communication and transportation in India. Do they need an expansion? If so, in what direction?
5. Explain with the help of illustrations: India has not got one uniform climate.
6. What are the special features of the rainfall of India? Draw a map of the country showing the distribution of rainfall and indicating the causes of the differences.
7. What are the Monsoons? What is their importance in India's economic life?
8. What influence does Indian climate exert on the economic progress of the country?
9. Write a short note on the soils and harvests of India.
10. Mention (a) The chief food crops, and (b) The chief textile crops of India. To what countries are they principally exported? (C. U. 1927)
11. State the regional or geographical distribution of the more important of the commercial crops of India. (P. U. 1930)
12. What are our main crops? Attempt a geographical note on the following crops:
Rice, wheat, sugar and cotton.
13. What is the utility of forests to India? What is the policy of the Government with respect to forests in India?
14. What part do forests play in India's national economy? How can Indian forests be better utilised for the industrial development of the country? (P. U. 1929)
15. Locate the following mining industries:—
coal, iron, manganese and gold. (P. U. 1917)
16. Give an account of the chief mineral resources of India and point out their utility for its industrial development. (C. U. 1936)
17. Write a short note on: Sources of power and their utilisation in India. (C. U. 1933)
18. Examine some of the important hydro-electric power schemes, completed or in progress in India.
19. "India is a rich country inhabited by the poor"—Discuss.
20. To what extent is the production and trade of different regions of India determined by geographical factors? (P. U. 1937)

CHAPTER III

THE HUMAN FACTOR

Structure and Problems of Population

1. **Chief Characteristics of Indian Population.** India has an area of 1,809,000 square miles of which British India covers 1,096,000 square miles and Indian States and agencies 712,000 square miles. The total population of the whole country according to the latest census figures of 1931 is 351,450,689; British territory containing 270,613,162 persons or 77·2 % and the Indian States and agencies 80,838,527 persons or 22·8% of the total population.

The population of some of the Indian Provinces according to 1931 census was as follows :—

Assam	...	8·6 millions
Bengal	...	50·1 "
Bombay	...	22·2 "
Madras	...	46·7 "
Punjab	...	23·6 "
U. P.	...	48·6 "

A useful study of the relation of population and economics of a country must take account of the following characteristics of its numbers :—

1. Proportion of Men and Women.
2. Number of Ages and Stages of Life.
3. Number of Married Persons.
4. Fecundity of Marriages and size of families.
5. Average expectation of Life.
6. Distribution in Rural and Urban Areas.
7. Distribution according to Occupations.
8. Birth and Death Rates.
9. Density and Movement of Population.

1. **Proportion of Men and Women.** A study of the proportion of men and women of a country's population is important, as "the percentage of females affects the labour market to the extent that women are wage earners, while a considerable predominance of either sex not only influences marriage and fecundity, but exerts some influence on social life in general."

In India the number of females is less than that of males ratio being 940 : 1,000. In European countries there is an excess of females over males.

The deficiency of females at birth is a universal phenomenon, but in Europe relatively higher mortality among males brings their number lower than that of females. In India it is otherwise. The ratio of females to male death remains higher. An explanation is afforded by the existence of certain social practices as purdah, early marriages, deliberate neglect of health, strain of overwork, and absence of satisfactory conditions of mid-wifery in India.

What is more alarming is the definite progressive decrease in the proportion of females to males from decade to decade as is evident from the following table :—

YEAR	NO : OF FEMALES PER 1000 MALES.
1911	954
1921	946
1931	940

The question arises, "How can the sex ratio be improved?" The answer is not difficult to be understood. "It is a question of taking proper care of female children, of raising the age of marriage, of avoiding too frequent births, of abandoning primitive methods of mid-wifery, of educating women and treating widows better."

2. Number of Ages and Stages of Life. The importance of the age-distribution of a population is to find out the proportion of workers (effective population) to the total population. Here also India stands in a striking contrast to European countries. 'Our age-pyramid has the broadest base, and narrowest top.' It shows that in our population largest proportion is of children under ten, infant mortality is at its highest and longevity of elderly people very low.

Fluctuations always occur from decade to decade in the age distribution of a population, and in the case of India it is not because of any deliberate action of man, as it is in Europe, but because of natural causes—famines and diseases which take a heavy toll of human lives.

In India because of the upper limit of age being shorter, old age and incapacity for work set in earlier than in Europe. Accepting 15 and 40 as the lower and higher age limits of effective population, we find that in India there are only 40 % working people and this proportion is much lower than that of any western country.

In order to increase this ratio we should take every step to improve public health and hygiene so as to increase longevity of the people.

3. Number of Married Persons. There are three chief apparent features in Indian conditions relating to marriages :—

- (i) The universality of marriage,
- (ii) The early age of marriage,
- (iii) The large proportion of widows.

In India early marriages are as much the rule as the fact that everyone goes in for marriage whether he may be economically well placed for undertaking this responsibility or not. Among the Hindus 68% of India's numbers—marriage is regarded as a religious duty rather than a social obligation of biological necessity. This accounts for India's highest number of married persons of all the civilized countries of the world.

It has been remarked that "the census returns relating to marriage for 1931 are extraordinary and such as we might well be ashamed of."

The number of married per 1,000 of those between 0-15 years of age increased in 1931 (77 males and 181 females) whereas in most European countries the percentage of men marrying below the age of twenty is insignificant. So is the higher proportion of widows in India. Hindu widows numbered 124 per 1,000 between 15-40 years of age.

We require some such urgent and powerful forces in our society as will eradicate root and branch this pernicious evil of early and unnecessary marriages with their ghastly consequences.

4. Fecundity of Marriages and Size of Families. Although there is no definite classification of house-holds in India like that of European countries, yet when we compare the number of households and the average number of persons per family in India with those of other countries we find that the number of persons per family is higher in India.

Usual number of children born in a family in India is 4 to 6 the average number being 4.3.

In spite of this great fecundity a comparison with the previous statistics shows that the size of a family has tended to decrease on account of the disintegration of the joint family and increase in the mobility of labour, improvements in the means of communication and transport, the introduction of

the competitive system of wealth production and the impact of Western civilization. Still we need a further decrease in this direction considering the appalling poverty of our masses, who are all the more highly prolific.

5. Average Expectation of Life. The expectation of life in India is again much shorter than that in European countries, and it is so not only at birth but at all stages of life.

"The average expectation of a male in England is 55.62 years; it is only 26.91 in India, or less than half. In the case of females the figures are 26.56 for India and 59.58 for England..... For 1891 the English figure for male lives was 44.13 when the Indian figure was 25.54. In 1920-21, the English figure went up to 55.62, when even in 1931 the Indian figure, after having declined to 23.96 in 1901 and still further to 23.32 in 1911, was only 26.56. In other words, while the Englishman has added $11\frac{1}{2}$ years to his life in 30 years the Indian has in a longer period of 40 years put on only one year."

A steady and continuous increase in the expectation of life is a sign of improvement in material conditions of well-being, and is therefore a reliable index of prosperity. Such tests are not applicable to India, where people are not conversant even with the primary functions and duties of human existence. In India increase in prosperity may be measured by such standards as increase in litigation or drunkenness.

6. Distribution in rural and urban areas. According to 1931 census figures there are 2,575 towns and 696,831 villages in India; town population being 38,985,427 against 313,852,351 as rural, a ratio of 11.0:89.0. Comparing these figures to those of the previous census we come to the conclusion that 'urbanization is proceeding at a snail's pace in India.'

The growth of towns is dependent upon the growth of industries which is itself very slow in India. Moreover the growth of large towns in India has been at the expense of medium sized towns and not at the expense of the country side as was the case in western countries after the Industrial Revolution.

The present uneven distribution between towns and villages in India is an index of her economic backwardness. Development of industries, trade and transport can radically alter this distribution in favour of towns, but it should result in the rise of medium sized towns all over the country and not that of a few large towns. In this way only we

will be assured of the benefits of large scale production, and the amenities of life without any danger of moral and physical well-being associated so much with modern slum life of large industrial towns of European countries.

7. Distribution according to Occupations. A glance at 1931 occupation tables of India indicates the relative position of occupations from which her people derive their livelihood.

A. Production of Raw Materials.	}			65.84 %
B. Preparation and Supply of Material substances.	}	Industry...10.38		
	}	Transport...1.65		17.56 %
	}	Trade... ..5.83		
C. Public Administration and Liberal Arts.	}			2.86 %
	}	Persons living on their own income		
	}	...16		
D. Miscellaneous.	}	Domestic service...7.51		
	}	Insufficiently described occupations...5.03		
	}	Unproductive... ..1.04	13.74%	

India being an agricultural country class A occupies the foremost place in the above table. A comparison with the figures for 1911 and 1921 shows that whereas there has been a very small fall in class A, class B has not gained much thereby and Indian industries still support a very small per centage of our population.

Amongst the civilized countries of the world India has the highest percentage dependent on agriculture and the lowest percentage employed in industries.

The economics of a country dependent on so great a measure on agriculture in this era of industrial progress must be unstable, and the remedy may only be a development of the manufacturing industries. This can be easily evident from a study of the rapid economic changes in European countries, where the basic laws relating to the growth of population have undergone a modification.

“ In former times the growth of numbers was chiefly determined by the productiveness of land. The growth of civilization, which implies mystery of industry and trade, makes it possible to become independent of agricultural conditions, and cause a heavy density of population also

in places poorly endowed by nature. The great increase of population among modern civilized peoples is due to the growth of trade and industry."

It is consequently a weakness of our economic system that in spite of the rich resources of our country a very small percentage of our population is engaged in industries, and the foremost occupation is tilling the soil in the old hackneyed manner. This makes us utter, 'India is a rich country inhabited by poor peoples.'

8. Birth and Death Rates. As regards both birth and death rates India occupies a position of unenviable pre-eminence amongst the civilized countries of the world. Annual Birth Rate per 1,000 inhabitants in some important countries in 1931 was as follows :—

British India 34·3, Japan 32·2, Italy 24·9, Canada 23·2, U. S. A. 17·8, United Kingdom 16·3, Germany 16·0.

Annual Death Rate per 1,000 inhabitants in some important countries in 1931 was as follows :—

British India 24·8, Japan 19·0, Italy 14·8, Canada 10·1, U. S. A. 11·1, United Kingdom 12·5, Germany 11·2.

In India both rates are higher than in any other country, and while both exhibit a tendency to fall in the west here they exhibit no such tendency distinctively.

This is the most undesirable of all the characteristics of Indian population. A high and unchecked birth-rate—as the case is in India—necessarily implies a high death-rate. In a country where the growth of number is controlled by epidemics and famines, it is impossible to speak of any definite trend in death-rate.

The two outstanding features about it are high infantile mortality and high female mortality at reproductive ages. A comparative study shows no signs of appreciable abatement at all comparable to the decline that has taken place in the west, where a century before infant mortality was as high as in India to-day. Infant mortality under one year for 1,000 living births in 1931 was as follows :—

British India 180, Canada 85, United Kingdom 68.

It is not very profitable to speak of the many social evils as being responsible for this phenomenon as the fundamental causes underlying Indian infant-mortality are our grinding poverty and the horrible illiteracy of the masses which make them unable to withstand the onslaughts of epidemics and famines, to combat which is

required a knowledge of the principal laws of sanitation and personal hygiene. About literacy in India an economist has well remarked: "How do we stand in the matter of illiteracy as compared with other countries? We lead the world." In 1931 the percentage of our illiterates was 90·7.

9. Density and Movement of Population. The mean density of the whole of India is 195 per square mile; that of British India is 248 and of the states 114. But mere numbers supported per square mile have small significance unless we take into account the standard of life of the population in question, and the case of every country must be considered on its own peculiarities and characteristics in the matter of connecting the density of the population with the economic welfare of the people. We may have no absolute principles to guide us here, only relative aspects can be considered.

The mean density of population in India gives no idea of the actual distribution of population in different parts of the country, as the actual figures vary between such extremes as 6·5 in Baluchistan and 4,000 in the Cochin State.

Likewise it is not very fruitful to determine such things as rainfall, configuration or irrigation as the only factors affecting the density of a country's population, as it is always a collective influence of natural as well as human—social and economic—forces which determine the density of a country's population. A country may have all the natural resources at its command, but the weight of its social customs and traditions at its back, checking its economic progress, makes its population suffer from many undesirable consequences. The case of India taken as a whole is of that sort.

India, being a land of agriculture with a negligible influence of industries we find that the density of population in India varies mainly according to her agricultural conditions. The strange structure of her social and religious institutions also plays its part in this phenomenon of her economic life.

The absence of rapid developments in the agricultural methods and of scientific improvements in this sphere along with no substantial increase in the area sown with crops means that there has not been any increase in the output of production in India; whereas population has been on the increase in the last decade. Under such conditions the land can support larger numbers only on

the assumption that the cultivators accommodate themselves to a lower standard of living.

This increasing pressure on the soil in India is highly alarming, and it can only be remedied if the agricultural resources of the country expand at a more rapid rate than the population. To have a better comprehension of this state of affairs let us determine the movement of population in India during the last four or five decades.

The figures for the various years ranging from 1881 to 1931 show that the actual increase* in the total population has been very slow from decade to decade—that although the birth-rate is high, death-rate has almost kept pace with it, bringing the survival rate in India to a lower degree than that of the European countries, where although birth-rate is much lower than that of ours, death-rate is lower still. The problem of Migration—inland as well as foreign—has however not been a decisive factor in determining the movement of our population, as neither it has ever occurred in a great measure, nor it has tried to touch the basic characteristics of our numbers.

Another peculiarity of the movement of our population is that the rate of increase in the different decades was very unequal. The figures show a period of comparative rapid increase following one of an almost stationary population. The explanation lies in the fact that the growth of population in India is determined not merely by the relation between normal birth and death rates, but by abnormal causes which affect this relation *i.e.*, famines and epidemics.

This makes us believe that the increase in numbers in the period 1921-31 (from 318·9 millions to 352·8 millions, *i.e.*, an increase of 10·6%) “is a cause for alarm rather than satisfaction.”

As we have seen, the pressure of population on land has increased, the system of universal marriage prevails and the birth-rate and death-rate are the highest in India. One is naturally afraid from the peculiar movement of our population in the past that epidemics and famines will carry off millions of our people, enfeebled by want in the

* Real increase of population (millions)	Rate per cent. of real. increase	Period
3·0	1·5	1872— 81
24·3	9·6	1881— 91
4·1	1·4	1891—1901
18·7	6·4	1901—1911
3·7	1·2	1911—1921
34·0	10·6	1921—1931

coming years. And considering the average rate of increase since 1872 we may say that our population on the whole is not increasing rapidly. As compared with almost all the leading countries of Europe the rate of increase has been much lower in India.

II. The Problem of Over Population. Examining the influences enumerated above with reference to the growth of numbers in India we come to the following conclusions. The birth and death rates and the rate of infant mortality are the highest in the world. India has the largest number, per 1000 of children below ten, and the smallest number of persons above fifty. The average duration of life is less than that in any European country. There is no country in the world whose population is controlled by epidemics and famines to the same extent as that of India and in spite of the universality of marriage and the high birth-rate the population increases more slowly than that of almost all the leading countries of the world.

What is the explanation of this extraordinary state of affairs? High death-rate—especially infantile mortality and the shorter duration of life may be to some extent due to the climatic and hygienic considerations or some social evils. But there is still “an extravagant reaction to conditions of public health” in India. What are the causes of this reaction? Malthus regarded diseases as the necessary consequence of over-population. “What is over population?” “Is India overpopulated?” These are the two questions which arise in our minds when examining these characteristics of our population.

In this connection we have to note that the tropical climate of India, and preponderance of agriculture in her life, poverty and low standard of living, unequal distribution of her wealth, lack of scientific knowledge among her agricultural workers, and her industrial sloth are so interrelated and mixed up with the characteristics of her numbers and the attitude of an alien government towards her, that it becomes difficult to analyse the relation of cause and effect amongst them. This has made the problem, whether India is over-populated, a bit confusing and complex.

Before discussing this, we take into account the Malthusian Law of the Growth of Population which laid down the following conclusions:—

“The increase of population is necessarily limited by means of subsistence ;

"Population invariably increases when means of subsistence increase, unless prevented by powerful and obvious checks ;

"These checks and the checks which keep the population down to the level of the means of subsistence, are moral restraint, vice, and misery."

Not to speak of its present modified form as the Neo-Malthusian Doctrine, ever since its enunciation this law has not been universally accepted. Malthus wrote at a time when the great scientific discoveries and the epoch-making inventions of the new machines and the processes of the 19th and 20th centuries were unknown, and even Europe seemed to Malthus over-populated in the increasing number of their population. Europe, in spite of the beginnings of the new industrial order in England was still dominantly agricultural. In England the first consequences of the factory system were manifesting themselves in the form of overcrowding in towns and wretched conditions of the new labouring class. Later scientific inventions and the decay of the *Laissez faire* order improved the situation considerably. It was after him that the forces let loose by the Industrial and Agrarian Revolution in the west enabled vastly large numbers to be maintained in much greater comfort than before. The spread of industries, trade and transport, and the growth of manufactures with the consequent increase in national wealth and income have now come to determine the growth of population in the leading industrial countries of Europe, instead of the considerations of food supply or the means of subsistence.

In the light of these rapid changes—changes undreamt of and unimaginable for Malthus, over-population now does not mean the tendency of the population to outgrow the means of subsistence, in the sense in which Malthus used the term. But over-population results when population increases more rapidly than national income and wealth.

This modification of the Law has resulted from the effect of those forces which have been in operation in the European countries, and even in Japan, and have produced such out-standing and unforeseen results that whereas the growth of population in those countries has been more rapid than that in India, we find there side by side a rise in the standard of their life instead of the cries of over-population. It is all due to the fact, that the Malthusian Doctrine, that when means of subsistence increase, population must increase so rapidly as to press against them,

unless "prevented by obvious and powerful checks," is no more valid in its entirety, and it is no longer in operation in the progressive countries of the world. The growth of numbers there is being accompanied by a steady rising standard of life, which calls forth such psychological forces into action as tend to reduce the birth-rate. The death-rate also goes lower. All these developments in the West have been in defiance of the Malthusian Law.

Then arises the question whether the Law can be applied to the Indian conditions relating to the growth of numbers. The general characteristics of the growth of population in India have already been enumerated above. These show that "our birth and death rates are high; the pressure on the soil is steadily growing; marriage is universal and the production of children uncontrolled; a great majority of the population lives not only near the margin of bare subsistence but below it; the reaction to disease is extravagant."

Anyone who considers these facts may unhesitatingly declare that the Malthusian principle has been at work in India. And some economists do hold that the population of India has outgrown the supply of food. But a review of the total out-turn of agricultural produce of India shows that the total Indian produce is enough for her own population and it cannot be said that there is any lack of food in India. Her self-sufficiency in this matter is also shown by the fact that India practically does not import food. Consequently the view that the shortage of food restricts the growth of numbers in India must be dismissed as untenable. But this does not in any way solve the problem of the peculiar movement of Indian population. It is a movement marked by periods in which population remains practically stationary, and for the slower rate of increase of population in normal years than in western countries. The explanation lies in the poverty of the people, the low average income per head of the population, the low standard of life, and their general resourcelessness. In the case of more than 67% of our population—the poor peasants—the meaning of heavy taxation is also significant in relation to the movement of population. It is a taxation which has been of late begun encroaching on the peasant's subsistence, and has become a burden beyond his taxable capacity to bear, and goes a long way in decreasing his chances of survival in the struggle for existence. "Underfed, overtaxed, and carrying a heavy load of debt, the cultivator cannot react to famine and disease except in the manner he does."

Is it not then an irony of fate that a country which produces enough food for her population and has also been exporting it, should be unable to bear the same rate of increase of population as the food importing countries of the world?

The explanation lies in the statement already made that in the advanced western countries growth of population is not determined by the amount of food. The chief factor of importance in this connection is increase in national wealth and income consequent upon the growth of manufactures which has enabled the industrial countries to maintain a rapidly increasing population at a higher level of comfort than that of a hundred years ago.

We may thus hold that the amount of food is determined by physical conditions governing production, the ability to buy it, and by the distribution of wealth. Malthusian principle of population was based on the quantity of food produced relatively to the growth of numbers. But the principle of population which is now in operation in India has more reference to the production and distribution of wealth than to the amount of food produced.

"We may therefore come to the conclusion that whereas the movement of our population has been governed by Malthusian Law it may again be insisted that the problem is not merely one of production and food supply, *i. e.*, the means of subsistence." "If all the food that India produces were equally distributed, every one would have enough, and probably a small surplus would be left over."

Besides this we have to consider a fall in the standard of living of large masses of the population—the inevitable consequence of a rapid increase of numbers when the economic resources of a country fail to expand correspondingly. A fall in the standard of living weakens the disease-resisting power of the people. The reaction of the population to disease is suggested by Indian experience as a reliable test of over-population.

For this we should take into account the following statement of a German Economist:—

"In view of what has been said above it will be readily admitted that there was no absolute over-population in the sense at any time in the past in so far as we understand by that term a population which cannot live in its territory in spite of a most complete and rapidly progressing technique, transportation system, colonization and moral and social organization. These assumptions were almost never or

only very rarely realised. The practical question essentially is that of actual or threatened relative over-population *i. e.*, such density of over-population as would make its pressure felt in view of the existing conditions of life and economic prospects."

It is impossible to say that India is over-populated in the absolute sense—that is, we have not arrived at the stage where there is no hope of any further increase in national income and wealth, and population therefore must cease to expand. We have not exhausted the possibilities of agricultural and industrial development.

Likewise the question of over-population has no reference to the density per square mile, as compared with 195 persons (1931) per square mile in India there were 666 in Belgium, 650 in England and Wales, 513 in Netherlands, and 332 in Germany. No one for a moment thinks that these countries are overpopulated. But in these countries there exist such conditions as are always adopted to the best advantage of their economic progress and prosperity.

A more practical question, therefore, for us to consider is that of relative over-population or over-population with reference to existing economic conditions. Our social and religious customs and prejudices also stand in our way.

Conclusion. We may consequently conclude that India is overpopulated in the relative sense of the term. There is no doubt about it. There has been relative over-population throughout the past sixty years as shown by the irregular rate of increase due to the strong reaction of our people to famines and diseases, and the fall in the standard of living of our masses.

In advancing this view that India does exhibit symptoms of relative over-population we must not be supposed to hold that the country with its vast resources is incapable of accommodating larger numbers, if its resources are properly developed and expanded.

Methods of relieving Over-population. The gravity of the problem of Indian population is therefore evident enough. The most urgent need is of relieving the growing pressure on the soil and for this purpose the following measures have been suggested :—

(i) Redistribution of population among the different parts of India or Inter-Provincial migration.

(ii) Emigration.

(iii) Modernization of agriculture and extension of irrigational facilities.

(iv) Rapid development of industries. (Cottage industries as well as organised industries).

Inter-Provincial Migration and Emigration. The scope of relieving the pressure of population by inter-provincial migration is very little. Fertile provinces are thickly populated. Assam and Burma have already attracted labour from adjoining and other Provinces. Moreover, Indian labour is comparatively immobile. Out of a total population of 350½ million, enumerated at birth place by the census of 1931, hardly one million were born elsewhere. The immobility of Indian population and the home loving character of the Indian people 'is the result of economic and social causes, and of the immobility of the agricultural population rooted to the ground, fenced in by caste, language and social customs and filled with an innate dread of change of any kind'. Provincial autonomy has aroused provincial consciousness and with the intensification of this feeling a regular inflow of labour from other provinces is bound to be resented.

The total number of Indians residing abroad is only 2½ million. Fresh emigration is hindered by immigration laws and political and economic disabilities imposed on the immigrants. Repatriation of Indian immigrants is becoming necessary as Indians are being squeezed out of foreign countries.

Agriculture and Irrigational facilities and Rapid Development of Industries. As regards our industrial development we should know that it should form the most essential feature of our future economic programme as it is clear that industrial development enables a country to support a larger population and at a higher level of comfort than agriculture alone, and that also of the ancient type, as in the case of India.

A rapid industrialisation on the right lines will lead to a greater production of wealth. Agriculture also must be improved and modernized. And a better distribution of it will lead to those economic conditions in which the rate of growth of numbers will adjust itself to the growth of national income and national wealth. Although the more important problem is that of the greater production of wealth, yet there is a growing consciousness throughout the world of the grave inequality in the distribution of wealth under the existing system. It is sometimes thought that wealth is more equitably distributed in an agricultural than in an industrial country. But the distribution of the wealth in India is not quite equitable. In trying to increase

the income per head by a better distribution of wealth we must remember: "We are not interested in maintaining a static situation in which the total income, even if equally distributed would be inadequate, we are interested rather in producing a dynamic situation in which increasing quantities of newly created goods and services would become available for every one."

To achieve all these aims and objects the outlook on life of Indians must be changed considerably and this necessitates a spread of full and compulsory primary education. Such education will make the workers and the labourers intelligent, teach them the elementary principles of hygiene, and endow them with foresight and ambition. Their deep rooted habits and conservatism should also disappear, giving place to liberal and better ideas. Their superstitions about many social customs and religious observances are also to be displaced by modern economic ideas and ideals.

As long as this fundamental change does not occur, it is futile to speak of arriving at any easy solution of the serious problem of Indian population because no permanent schemes can be planned unless our agriculturists and labourers are taught to realize the urgent necessity and indispensability of those measures.

And when this obstacle is removed it will save the people from epidemics; it will lead to a rise in their standard of living and will create in them a desire for higher and richer life with the subsequent consequences that both the birth and death rates will go down. People will become conversant with the Neo-Malthusian Doctrine of Birth Control (Putting a voluntary limitation to birth).

SUMMARY

The total area of India is 1,809,000 square miles with a population of 351,450,689 according to the census figures of 1931. In connection with the economic characteristics of the population of any country the facts to be considered are: proportion of men and women; number of ages and stages of life; number of married persons; size of families; average expectation of life; urban and rural population; occupational distribution; birth and death rates; density and movement of population.

All the evils of the irregular growth of population are to be found in India. The proportion of females to males is smaller and this tendency is on the increase. There is the largest number of children under ten, highest infant mortality, sufficient low longevity of life resulting in shorter and shorter expectation of life at successive ages. The number of married persons is more than

what is in other civilized countries. The distribution in rural and urban areas is far from satisfactory and more so when we notice the huge difference in the standards of living of the two. Occupational distribution shows preponderance in agricultural activity, which is still so hackneyed, backward and unindustrialized. In respect of birth and death rates the less said the better. These are, as some one remarks, the most undesirable of all the characteristics of Indian population.

When we study the figures for any definite period of time we notice that in the matter of mean density and movement of population we are still living a highly unprogressive economic life. In spite of having so varied natural resources at her command, the country suffers from an increasing pressure on the soil. Another notable characteristic is that the figures for some consecutive decades show a period of comparative rapid increase following one of an almost stationary population. Closely connected with it is the problem of over population, which in its intricacy is mixed up with the problems of preponderance of agriculture, general poverty and resourcelessness of the people, unequal distribution of wealth, lack of scientific knowledge and industrial sloth.

The Malthusian Theory of the growth of numbers is no more valid in its entirety, as instead of the means of subsistence it is the factor of national wealth and income that determines the movement of population now in the leading industrial countries of Europe. The law, therefore can be applied only partly to India. Although enough food is produced for its numbers, and there is no scarcity of means of subsistence yet the peculiar movement of population comes to an extent under the Malthusian principle. But we must not forget that the present-day conditions even in India prove that over-population has more reference to the production and equitable distribution of wealth in the country than to the amount of food produced. We may thus speak of relative over-population rather than of any absolute out-growth of numbers. It is only with reference to the existing economic handicaps and some social and religious customs that we may conclude that India is over-populated, and if they be reformed and removed India can surely accommodate the present number. For this purpose such like measures as redistribution of population, modernization of agriculture, migration, industrialization of the country are often suggested. But before all this should come a scheme of thorough compulsory primary education which should enable the masses to realise the gravity of the problem and to comprehend the necessity of making at once a united effort to better their lot in life.

QUESTIONS ON CHAPTER III

1. Estimate some of the important reflections suggested by the census returns of 1931.

2. Give a thoughtful comment on the characteristics of Indian population.

3. Account for the high birth-rate and high death-rate in India.

4. "The Indian birth-rate is high, but so also is the death-rate. Therefore there can be no question of over-population in India."

Do you think this is a valid line of argument ?

5. What do you know of the density and distribution of population in the various parts of India ? (P. U. 1927).

6. What has been the rate of growth of the population of India during the last sixty years. Why is it that, even with a lower birth-rate, some other countries have a higher rate of growth than India ?

7. State the theory of population as enunciated by Malthus. How far is it applicable to India ?

8. Explain the meanings of over-population, and explain how it can be detected.

9. How far do you agree with the view that the population of India is increasing too fast, and that it is pressing on the means of subsistence ? (P. U. 1920).

10. The average density of population in Belgium is 654 and in India 177. What conclusion do you draw from these figures ?

11. What remedies do you suggest for overcoming the miseries due to over-population in India ?

12. Explain and discuss the statement : "The chief problem which confronts us to-day is that of the growing pressure of population on the soil. Agricultural research will not solve this problem. There is only one solution of it—rapid industrialization of the country." (Brij Narain)

13. How far is the density of population in India determined by geographical factors ? (P. U. 1938)

14. Is India over-populated ? What are the tests you would apply to determine the question ? (P. U. 1935)

CHAPTER IV

THE SOCIAL FACTOR

Social and Religious Institutions

1. **The place of Religion in Social life.** Under the inspiration of the 19th century materialism of the Industrial Europe it has become a fashion for our Indian intellectuals to approach the question of the religious environment of this country in an apologetic spirit. They seem to think that all our economic ills are due to our religious beliefs and that only if religion was to be exterminated a new era of limitless economic prosperity would ensue. But they forget here that economic prosperity is not the fundamental purpose of life and that even Europe in spite of its rank materialistic thought and practice has not been able to bring about an economic and social millennium. In fact it is being punished by the supreme material laws of human existence for the great blunder of conceiving life in water-tight compartments and not as one comprehensive whole in which the material, the spiritual and the religious aspects are inextricably blended together into an organic unity.

An economist studies only that aspect of human behaviour which has as its end the acquisition of marketable means of satisfying human wants. But it will be wrong for him to deny the importance of other aspects of human behaviour or to consider all other aspects and aspirations of human life to be subservient to the economic.

In our capacity as economists therefore we have no right to assign value, praise or blame to the existence, character or institutions of any religious creed as such. We however can pass judgments on the economic implications of particular social and religious customs or institutions. The ultimate practical policy to be adopted, however, will not depend merely on the economic advantage that a certain step might bring, but on the net additions to human welfare, considering its repercussions on all the various aspects of social life. Thus economic advantage may have to be sacrificed in the interests of defence, or for ethical or æsthetic considerations.

Religion has been blamed for being a constant source of friction among the various elements of the population of India and a stumbling block in the way of social and political

solidarity. To this it may be replied that social friction exists even when religion only plays a minor part in social life. Social friction is due to the inborn human instinct of greed, hatred and lust for power which in the absence of religion are likely to prove more dangerous and which may be made harmless by a proper appreciation of the true mission of religion.

Religion if taken in its true spirit is an invaluable moral force and need not stand in the way of the emergence of a spirit of community in political and economic matters. But religion in this country owing to historical and other reasons has been shamelessly abused and prostituted so that instead of acting as a lever to raise the people above the crude manifestations of the struggle for existence it has accentuated the worst of its features. The solution however is not to undermine religion or deny its existence in blind imitation of the thought and practice of the West, but to make an attempt to regenerate the true religious spirit so that we avoid the sterility of pure materialism of the western countries on the one side and the subjection to blind superstition that sometimes passes for religion on the other.

Thus we deny the usual assertion that religion as such has nothing to do with the social economic and political life of a country. If such a religion exists it has no right to exist because it is merely a dead branch of a living tree. But every living religion should circulate as the very blood in the organic structure of a community. We should therefore be proud rather than be ashamed of the religious outlook of our people. What is to be condemned is the abuse of religion, its prostitution for unworthy ends, not the institution of religion itself. Industrial Europe has grossly abused science but no one ever suggests that scientific progress should cease. The East has prostituted religion and many people are after the elimination of the religious factor from life. Science leads to mastery over man's environment, religion leads to mastery over man's self. Mastery of environment without the mastery of self inevitably leads to self destruction—which appears to be the miserable fate of Europe.

Coming down from the spirit of religion to specific institutions through which it has manifested in the past there is a greater room for criticism. To be of any use to society religion must work through concrete institutions. But while religion is something eternal the institutions through which it expresses itself become out of date through the working of the dynamic forces of society. This merely

means that in order to keep religion alive—in the sense of its being a vital influence in life—it must express itself through institutions which possess adaptability to the changing demands of social environments.

Social Institutions. Now we come to the social institution which may be partly of religious origin and partly merely customary with no religious sanction behind them. In this country, however, it is very difficult sometimes to distinguish between the two. There is a strong case however for their reform and even abolition if they have lost their original justification. We as economists propose to discuss three of the most important social institutions of this country. They are:—

- (a) The Caste System,
- (b) The Joint Family System,
- (c) The Laws of Succession and Inheritance.

All the above three institutions come down to us from ancient India and are primarily associated with the Hindus. But even the Muslims along with other communities of India have not escaped their influence.

(a) *The Caste System.* Some thinkers regard the evolution of the caste system to have been the result of gradual development of the ancient Aryan institutions which came into being after they had subjugated the aborigines of the land leading to the employment of the indigenous races in occupation involving manual labour while the higher pursuits were reserved for the Aryans themselves. This theory makes it somewhat difficult to explain how the division of castes became so rigid as to have persisted throughout the periods of Indian history without getting a set-back even at the hands of the essentially democratic influences of Islam. It is believed that in its early stages the system was fluid in character as it was based on the principle of social selection and the division of labour rather than on that of birth or heredity. When and how it lost its elasticity and assumed an unparalleled rigidity is an insoluble and unprofitable conundrum. We may to some extent accept the suggestion that a settled state of society favoured the growth of caste by ensuring the continuity of functions through several generations bringing to the forefront the principles inheritance and heredity. But there are so many difficulties against this contention as against another explanation which regards the undeveloped state of communications accompanied by the ignorance of the masses as the cause of the difficulty of social intercourse leading to caste organization.

With the passage of time these castes came to be evolved into functional, racial and then sectional types. The functional ones are the most important and greatest in number as they constitute all sorts of callings and professions of the Indian society. The other two are not so numerous and important ; the racial ones include such castes as those of Jats, Chamars etc., while the sectarian castes consist, of those which had their origin in some religious or social movement like the Lingayats in Bombay and the Saivas in United Provinces.

Whatever may be the real significance and purpose behind so much distinction and classification of society, there is none denying the fact that the system wrought itself to such an extent into the very fabric of the life of Indian society as not to yield to the otherwise powerful influences of western civilization. So much so that the primarily social, the system gained so much of religious tinge as to gain a complete recognition at the hands of the British Government which defines the term caste as :—

“ A collection of families or groups of families bearing a common name which usually denotes or is associated with a specific occupation : claiming common descent from a mythical ancestor ; human or divine ; professing to follow the same calling ; and regarded by those who are competent to give an opinion as forming a single homogeneous community.”*

The question of merits and demerits of such a system are to be studied here purely on an economic basis. The principle of division of labour on which it is to be based is an economically strong and efficient system. In the past when there was no other organisation of public instruction in different arts, and crafts the caste system afforded the only possibility for the son to learn the family occupation and acquire proficiency in it with less effort and more care in the congenial atmosphere of home. It was a natural and rational system which accounted for the preservation of different arts and crafts through hereditary transition.

In its early stages when Aryans were settling in India, it may be supposed that the caste system helped the collaboration of races and co-operation of indigenous culture with the Aryan one. Its development also led to the fundamental stability and contentment of society.

The certainty and rigidity of the career and occupation of every individual in relation to the caste, he belonged to, saved him from that mental worry and restlessness which is

* Imperial Gazetteer of India, I, page 311.

associated with the choice of a profession by a young man in our modern state of affairs.

Along with these merits of the system we have to enumerate its demerits also. The principle of endogamy which it advocated created a deterioration of the superior stocks, leading to the social evils of heavy dowries, infanticide etc. There is to some extent the prevalence of exogamy among the sub-castes but it is to a very limited extent, and does not seem to affect the major castes.

One disadvantage of the caste lies in the fact that it prevents an individual from following his inborn capacities and inclinations towards some occupation which is other than the one to which he belongs by birth. This means nothing but a check on the economic welfare and progress of the country.

The difficulty in change of occupation, especially for persons of lower caste desirous of taking to some calling of a higher order, leads to the immobility of capital and labour causing the overcrowding of certain occupations even in the presence of a great scope of development in some other professions. Besides this the disinclination in the minds of higher classes towards occupations belonging to lower caste further diminishes the chances of their economic improvement. This uneconomic superiority complex of the dignity of higher classes stands in the way of economic adjustment of society.

The pressure of caste prejudices in the minds of certain classes against the use of some methods of agricultural improvement and industrial production *e.g.*, the use of bone, fish and night-soil as manure—is another loss entailed by the caste system.

The absence of a speedy adjustment between demand for and supply of a particular kind of labour, as well as the minute subdivision of labour and the difficulty in the way of co-ordinating capital, manual labour and intellect from various classes as a result of the rigidity of caste system has been the cause of impeding the progress of large scale production in our country.

The many economic disabilities in the path of the depressed and untouchable classes arising out of their social limitation and ostracism constitute another serious obstacle in the way of our material advancement.

It will be a profitable study at this stage if we constitute a comparison between our caste system and the Guild system of Mediæval Europe. Such a comparison will further exhibit some of the inherent defects of our system in the light of what was a better and more suitable system

of guilds, which has now ceased to exist giving its place to the better economic developments of Industrial Europe, whereas our caste system despite its present unsuitability and undesirability persists to linger on.

The two systems seem apparently to be identical in as much as they served the purpose of mutual benefit societies by promoting mutual good-will among their members and providing for their social and economic well-being.

Still the European Guilds differed from the Indian castes in their fundamentals. The guilds were voluntary associations with a scope for inclusion of strangers, inter-marriages and broader social feelings. They constituted a real tie amongst their own members and were a source of strength against tyranny of mediaeval nobles and monarchs. They were responsible for fostering art and industry and preserving their mechanical skill and dexterity.

But castes of India far from being voluntary or flexible ever remain in water-tight compartments denying all sorts of inter-relations to their members. They were more 'a symbol of disunion and weakness, being bound by rigid rules to their traditional duties and customs.' The lack of adaptability and general unprogressiveness constitute their further drawbacks.

From a study of these merits and demerits of caste and a comparison with European Guild System we come to the indispensable conclusion that with all its due share of praises and commendation, the system deserves nothing but an all round denunciation at the present day. It had its days of usefulness and utility, but now it seems to have outlived its natural course of life, and has become nothing but 'the canker of social jealousy and unfulfilled aspirations'.

Keeping in view the social evils, which have developed on this account in the Hindu society, and political set back, which has thus been imparted to the cause of the Indian nationality, paving the way for nothing but social intolerance and feelings of mutual hatred, one feels impatient in believing that for the realization of political and the consequent economic freedom and progress of India, the caste system has undoubtedly acted as a great hinderance and obstacle.

The impact of western culture and civilization, the influence of their modes of thought and action, with all their modern scientific developments in the domain of industrial progress; these are the forces which have been trying to break up the trammels of our antiqua-

ted system. Growth of modern trade and industry, linking up of rural and urban areas, improvements in the domain of transportation and communication—railway, post, telegraph, telephone, wireless, aeroplane etc.—have changed the outlook of Indians, in conjunction with the influences of western education.

The effect of social life of the West has led to an awakening of the lower classes through a self-consciousness and the crusade against the caste system initiated by many societies and organisations. The epic fast of Mahatma Gandhi to eradicate the evil of untouchability, which had taken very acute form has been another disintegrating element against the caste system.

Still one cannot ignore the deep hold the system has on the minds of orthodox and conservative people, mostly ignorant or even illiterate, especially the rural population and our women-folk, who unmoved by the trend of modern culture, tenaciously adhere to our old social customs.

(b) *The Joint Family System.* Next in order of importance comes the Joint Family System—a system which originated and developed after the Aryans had settled in India and had organized themselves into joint patriarchal units constituting many households. They were socio-economic organizations of a complex nature designed to live in a mutually physical and spiritual bondage; one household comprising even three generations at a time under the chief male head of the family. As regards the problems of property, food and worship the household or the joint family remained undivided.

This was generally the state of affairs when the Aryans took to agricultural stage and the institution acquired so much of prevalence and permanence with the passage of time that all its regulations about marriage, adoption, maintenance, inheritance and succession formed the basis of the present-day Hindu law.

The main characteristics of the system were as follows:—

1. The eldest male member was the head of the family and enjoyed an authority over all the affairs. In him were vested all powers of conducting and regulating the general, material and spiritual welfare of the family.

2. Women comprised a separate entity with their own head in matters of internal domestic management.

3. There was one common purse comprising the earnings of all members of the family and out of it every one received according to his needs.

A system based on these primary features of mutual good-will and understanding has its merits as well as demerits.

Among its merits may be enumerated the following :—

1. It affords the chances of a simple division of labour by allotting to every member a task which he did without selfishness.

2. In return every member was guaranteed at least a bare subsistence.

3. By providing for the aged, the infirm, orphans and widows suitable places in the family, the system absolved the state of all burdens in this direction.

4. The features of a common purse with a single household establishment and equipment served the purpose of economising family expenses by saving it from a division into several different households with fragmentation of every necessary equipment and articles of daily provision.

These merits went a long way in preserving the cohesion and solidarity of families in the past, which may be compared to some extent to the system of modern socialistic communities. But the passage of time brought in such phenomena and conditions as to lay bare some of its defects in the face of changed circumstances. These drawbacks appeared into limelight by the introduction of social and economic ideas of the west into India. The rise of industrial movements, the development of transport and communication, in brief almost all those influences which are tending to break up our caste system, coupled with the growing keenness of struggle for existence, are also causing disintegration in the joint family, and have made life more a matter of independent and individual initiative than merely of a selfless dependence on the joint family.

In the face of these uncontrollable forces the joint family system has lost much of its bliss, charm, and utility. The following are some of its defects which are now more apparent and manifest than any of its merits :—

1. The system being based on a principle which goes against the inborn desire of man to appropriate to himself all fruits of his personal labour and toil, cannot give any impetus to the development of human effort and ambition.

2. Rather it kills all sense of self-respect and responsibility in most of the members of the family by allowing for no scope of any huge reward in case of a huge effort put in by one individual to attain some personal gain or benefit.

3. The system is, all in all, uncompromising to the development of individual initiative and enterprise which is more or less the order of the day.

4. There is no scope in the joint family of any accumulation of capital for undertaking large scale production and enterprise.

5. By making each and every member adherent to the family there develop stay-at-home habits in them making way for the uneconomic feature of immobility of labour.

The tragedy of the whole situation is that whereas modern means of earning one's livelihood have brought into forefront such forces as are going to bring a separation between the members of the joint family the older generation regard it as their pious duty to cling to the system as fast as possible. Moreover, before the young there lies a greater scope for a development of their personal capacities and efforts but at places far off from their original home. This is why a spread of modern social and economic ideas looking repugnant to the older generation is going to dissolve the joint family. The loss may be great but the gain is greater. But with all our ideas of progress and economic welfare we should be cautious enough not to reach the other extreme of intense individualism killing the spirit of mutual sympathy, helpfulness and utility-characteristics of mutual welfare of a nation. In the absence of poor laws, unemployment insurance, old age pension in India the hardships caused by the break up of the joint-family system are bound to be acute.

(c) *The Laws of Inheritance.* Then we come to the laws of inheritance. In the past these laws were more or less governed by the Joint Family System. Consequently there was to begin with a complete ownership of family property—ownership vested in the family as a whole and not belonging to members individually; the head of the family being the manager of the whole property. In the beginning there was no question of alienation in this system but when it did arise later there were enunciated two different theories which are still in vogue known as *The Mitakshara* and the *Dayabhaga* Systems.

In the later case the father is the sole owner in his life time, while in the former the sons along with the father are joint owners. In the *Dayabhaga* system partition of property may be among brothers only while under the other system partition may be between father and sons.

Further on in a *Mitakshara* joint family there can be no inheritance, as property under this system is based on

survivorship and not on succession. In a Dayabhaga family the problem of inheritance arises only at the death of a member—his share descending to his heir.

Besides joint property there are also cases of separate property in India which are governed by the law of true inheritance for which legal provision is necessary.

Amongst the merits of these laws we may consider the following :—

1. Underlying these laws there is the principle of equity and justice in the distribution of property.
2. Such a system promotes the growth of a stable and substantial middle class composed of independent and self-respecting peasant proprietors.
3. Everybody gets something to start with, which provides a stimulus for making further efforts to acquire more. This may be the basis of industrial progress.

And then we have also some demerits to enumerate in this connection :—

1. Such an intensive system of succession and inheritance results in excessive sub-division and fragmentation of land resulting in uneconomic holdings.
2. It also makes way for litigation—mostly unnecessary, and money spent on it makes the peasants poorer.
3. Large capital resources being not available there is little scope for large scale enterprises.

So far we have spoken about the institutions of that part of our population which is called Hindu. About the Moslems the major of the minor communities of India—we may also pronounce a somewhat identical verdict.

To begin with, in the early stages of the development of Islam the proper course for every phase of the life of its adherents was found embodied in its scripture—The Holy Quran. The believers (Moslems) were to adhere strictly to its tenets in every walk of life : their politics, social laws, ethics, economics, and all their fundamental rules and regulations were in one way or the other derived from the Quran, and the Hadith (Prophet's Sayings). Islam was thus a movement unique and of its own kind with the strongest unifying force at its back, advocating a total absence of class distinctions between one 'believer' and another.

But it is now a millenium that has passed since the advent of Islam in India, where it got some colouring of the Indian state of society, as far as her caste system and joint family system were concerned. If the Hindus are blamed for having evolved a caste system leading ultimate-

ly, especially at the present juncture, to social hatred and jealousies, the Muslims stand in no better position to-day in having so mercilessly mutilated the cardinal principle of their religion.

As time went on, and Islam spread far and wide to distant countries and climes making converts from all nations and religions, it suffered greatly in the matter of its original solidarity. During its early stages, as long as it had not lost its freshness and vigour, it ever counted as one force, but with the passage of time owing to a variety of circumstances, there crept up a disintegrating influence among its followers, who having become more mindful of their own personalities, no longer thought it advisable to merge their identities in the greater cause of Human Unity. This sounded the advent of class distinctions and class struggles amongst their ranks.

Communalism in India. "Poor, illiterate, and ignorant as the masses are, their passions are easily inflamed by communal leaders, and from time to time India celebrates orgies of communal rioting, murder and arson. Communal leaders are no common men. They enjoy rank and titles, and are honoured by Government."

A fight for the narrow sectional interests of one community against the other weakens the nation politically and economically. Is it not then the most urgent and expedient demand of the country to ask every one of her inhabitants to abolish such baneful ideas and prejudices which have been responsible for degrading the nation?

It needs not the mental equipment of an Aristotle or a Plato for any one of us to easily realize the real need of the hour. For every one of us—thirty five crores of Indians, it is fundamentally essential to believe that we are one and all, Indians. By ourselves we may profess any form of religious practice, and may belong to any aspect of social status, as these are more or less personal affairs, but in political as well economic sphere we should have a unity of purpose and unity of action to unite all our forces for a common united front.

Indian Fatalism and Economic Progress. The fatalistic attitude of the mass of the Indian people is considered by some thinkers a serious obstacle to their having an economic outlook on life and its problems. Indian fatalism can be assigned to political anarchy which prevailed in the country before the advent of the *Pax Britannica* here. Life dominated by despair as a result of frequent raids by the free-booters made for fatalism.

Illiteracy strengthend belief in superstition. Pathetic contentment was not so much the result of indifference to material progress as due to economic oppression and sheer helplessness.

Before the advent of the modern scientific era fatalism also infected the masses in Europe. Epidemics were taken to be an indication of the displeasure of gods against which it was no use struggling. But the development of science in various directions gave the people in the West a strong consciousness of their mastery over nature. This dispelled fatalism in the West and convinced people in the efficacy of persistant human effort for fighting human ills. The progress of science and the spread of general enlightenment is also changing the Indian outlook from one of despair and fatalism to that of hope, ambition and self-effort. Indian fatalism henceforth should disappear and enable our people to take an economic outlook on life.

SUMMARY

Keeping in view the present day materialistic progress of the western countries of the world and the comparatively poorer economic conditions of our country, many people believe that our economic ills are generally a result of our social and religious beliefs and customs. A fuller and more comprehensive study of all the relevant facts and phenomena should reveal to us that religion is not the only factor which influences a people's economic condition. For an Indian economist this discussion becomes all the more important and necessary because of the diverse social and religious institutions of the country which at a cursory glance seem to be conflicting with one another.

The chief curse of this controversy of the present day is not so much due to religion as such as to its misrepresentation and the consequent misguidance of illiterate masses by our pseudo politico-religious leaders. This abuse and prostitution of religion combined with the traditional conservatism of our people constitutes one of the real ills of our national existence. The remedy for its removal is not the undermining of religion as some of us may imagine, but the proper enlightenment of the country's population on these issues.

Amongst the social institutions the following three are generally in vogue everywhere :—1. The Caste System, 2. The Joint Family System, 3. The Laws of Succession and Inheritance.

1. *The Caste System.* The origin and evolution of this system is a controversial problem. Only this much is certain that with the passage of time it has always been occupying a greater and greater rigid place in our society. Whatever might have been

the forces at its back at the time of its early life, and howsoever useful and necessary it might have been for any length of time, none can deny the fact that now-a-days it has become nothing but 'the canker of social jealousy and unfulfilled aspirations'. When we estimate the merits and demerits of the system and bring them in contrast with the Guild System of mediæval Europe we find that whereas a better system of the west has ceased to exist giving place to newer phases of life, our caste system despite its disutility still clings to us with all its evils. Yet the modes of modern life imported from the west in the wake of European education, culture and civilization are waking their best to break it up.

2. *The Joint Family System* connotes the idea of the development of a number of socio-economic joint patriarchal units consisting of many households at a time. This process began almost at the same time as the development of the caste system.

This organization was of a complex nature designed for the purposes of mutual co-operation among the various members of a family. Like the caste system it has also its characteristic features, merits and demerits from an economic point of view. Considering the influences of the economic forces of the modern world we once again come to the conclusion that this system has too lost much of its bliss, charm and utility, and that its defects seem to be more pronounced now than any of its merits.

3. *The Laws of inheritance.* In the beginning these were generally governed by the joint family laws. Later on when the question of alienation of property developed, there were enunciated two theories which are still prevalent as the Mitakshara and the Dayabhaga Systems. Much can be said in favour of and against these two systems.

The above systems and laws we have discussed apply mainly to one part of our population called the Hindus. In the case of our Moslem brethren we find that their present conditions in this matter are almost equally unenviable. Although a study of the origin and early spread of Islam is totally a miraculous story, the present-day position of the Indian Moslems, who are as much Indian as the Hindus, tells a different tale.

Communalism is another serious obstacle in the path of our progress. It is imperative that all of us should sink our differences and create a united Indian people and thus facilitate the task of achieving our political-cum-economic goal.

The uneconomic outlook of Indians is supposed to hinder our material progress. Science and education have made men conscious of their control over nature. Thus is the fatalistic attitude towards life fast fading and giving place to hope, ambition and a determination to conquer difficulties.

QUESTIONS ON CHAPTER IV

1. Examine the institution of the caste. (C. U. 1920, 1929)
2. Discuss fully the economic effects of the caste system. (C. U. 1920, 1921)
3. Discuss how far the caste system is unsuited to the structure of modern society. (C. U. 1920)
4. Show how under the stress of modern economic conditions, the rigidity of the old caste system has been considerably modified. (C. U. 1929)
5. Examine briefly the institution of the joint family discussing fully its economic effects. (C. U. 1920, 1930, 1931)
6. What are the factors that tend to break up the joint family system in the modern times? (C. U. 1930)
7. What are the economic effects of the laws of succession in India? (C. U. 1924)
8. Examine how far the existing social and religious systems of India help or hinder the economic progress.

CHAPTER V

INDIA IN TRANSITION

I. The Old Economic Order. If we study the economic structure of our country as we find it to-day and then compare it with the old organization that existed, say, a hundred years back, we shall at once come to the conclusion that although the former still retains much of its previous character, some fundamental changes have occurred in it during that period, which have been greatly influencing the economic life and activities of our people. In order to understand what changes were brought in this matter, and by what forces we first take stock of those conditions and activities which were the basis of our economic organisation in the past, or what has been better termed, was 'the old Economic Order,' in India.

This 'old Economic Order,' "was the result of certain physical conditions which at one time or other prevailed practically in every country in the world, and wherever they existed, the economic type produced by them was more or less uniform." Morrison, who has thus classified the countries of the world into the 'old order' and the 'new order' countries gives the characteristics of the old order as follows :—

1. The predominance of custom and status over competition and contract, (2) The isolation of small groups of the population, as in the villages, and their economic self-sufficiency primarily due to defective transport and communication, (3) The preponderance of agriculture over other occupations, resulting in an uneven distribution of the population between the various occupations and the consequent predominance of the rural over the urban population, (4) Simple and imperfect division of labour owing to the narrow size of the market. (5) Small scale industry of the handicraft and cottage type carried on independently by the artisan himself, and hence the smallness of the capital engaged in industry and the absence of the middle-man manager or entrepreneur, (6) Absence of money economy and prevalence of barter or direct exchange of goods against goods, (7) Undeveloped credit and prevalence of usury.

Coming to the condition of Indian economic life under the old order, we find that the most striking as well as the

most interesting and important feature at that time was the village community with its peculiar constitution. The towns were neither very numerous nor very influential. They were almost as something apart from the general life of the country. Thus India was characterised by an aloofness from the outside world; it consisted of an immense number of entirely self-contained and self-supplying units with little contact with each other, and practically no knowledge of the outside world.

As regards the general occupations of the people, the agricultural population was by far the most important and formed the primary factor in the economic life of the village, while the industrial population, *i.e.*, population not directly dependent upon agriculture, but engaged in the old handicraft industries, was also mainly distributed in the villages and only to a limited extent in the few towns. It has been suggested that about forty per cent. of the population was dependent upon industries, both rural and urban, and the remaining sixty per cent. on agriculture.

The predominance of agricultural economy with the accompanying cottage industries meant that the proportion of the urban population of the country was small,—as small as 10%, and even many of the so-called towns were merely overgrown villages.

Village thus formed the really important unit of our old economic life. Towns generally were few in number, and owed their existence to one or more of the following causes:—

1. They were places of pilgrimage or sanctity, as Allahabad, Benares, Gaya.
2. They were the seats of courts as Delhi, Lucknow.
3. They were commercial depots situated on ancient trade routes as Mirzapur, Bangalore.

From the modern economic point of view the chief characteristic of those towns was their non-industrial character. This is not meant to convey that the towns had no industries, but rather that the industries did not form the main cause of their importance. There were indeed different industries in different towns depending on their nature and resources, and were generally the arts and the luxury industries producing fine textiles or other luxury products for the aristocracy of the courts, and being dependent on that factor, could not exist independently of the courts. Thus it was that with their gradual dissolution,

the whole economic structure of the urban life in India collapsed.

Though it was limited in its scope and extent, yet the urban industry was very important, as it was the best organized industry of the country at that time. High watermark of excellence was reached in the finished goods which enjoyed a world-wide reputation. The chief product was the textile commodity spread all over the country. The woollens, metal-work, brassware, copperware, gold and silver work, artistic work in wood and ivory and jewelry were other well-known handicrafts.

In these industries side by side with a division of labour, accounting for the attainment of a high degree of skill and excellence in every branch there was also some degree of localization, although imperfect. Still as compared with the other existing forms of industry in India, the urban industry was certainly the best organized, each craft having its own guild looking after the welfare as well as the quality of work of its members.

The village. The village formed the unit of agriculture, and therefore, its general constitution is of great importance, and also for the fact that the village, to this day remains the unit of administration in India. India has always been a land of small holdings whether worked by peasant proprietors or cultivating tenants. The variety of tenures in India has rather been complex, but this did not make a great difference in the internal constitution of the village.

Generally every village was an entirely self-sufficient economic unit containing within its bounds all the labour, capital and skill necessary for the agricultural and industrial activities in it. The inhabitants may be divided into three groups:—

1. The Agriculturists,
2. The Village Officers,
3. The Village Artisans and Menials.

The agriculturists, both the land-owning as well as the tenant classes, formed the most important section of the village community. Cultivation was according to the open field system. The size of the land was mostly small and the farmers worked on the land with their families and only occasionally with hired labour.

Each village had its own officers. First was the headman or the Lambardar, as he is called in the Punjab. Then came the accountant or the Patwari. After him was

the watchman and the village messenger. Besides these officials most villages had their panchayats or bodies of village elders. These panchayats preserved the political isolation of the villages and the corporate village life by dispensing justice and settling disputes from within the village community.

The nature of cultivation was dictated by self-sufficiency. The bulk of the produce or food grains were grown for local requirements. All the main needs of the community were satisfied locally. Two important commodities were produced to be sent out of the village as they could not be grown all over India. They were cotton and sugar. Trade, even in these, was of a limited extent, and over a limited area. The self-sufficiency of the village was more a result of natural forces than any conscious effort on the part of any one, as means of communication were either absent, or were very defective. Water carriage was impossible and wheeled traffic was slow and untrustworthy. Being thus completely isolated from the rest of the world, the village was compelled to make its own standing arrangements for satisfying all its requirements other than food, and it did this by attracting the various types of artisans by offering them homes and regular remuneration.

The position of the village artisan was definitely fixed. The urban handicrafts already referred to, though greatly advanced in organization, were numerically insignificant. The country artisan was numerically by far the most important industrial worker in India. There were two distinct classes of the country artisans :—

- (a) Those who were village servants.
- (b) Those who formed an independent class.

The difference between the two groups lay not so much in their economic position as in their mode of payment, and the time of payment for their services. It was more or less a difference of status. The former was paid by customary dues, and not by job. The payment was made in kind at harvest time. "Isolation of the village may not be so striking in itself, nor the fact that all the artisans lived in the village peculiar. But the peculiar feature of the Indian village community was that the majority of the artisans were servants of the village. They had their own plots of land, and their chief source of income was their share of each year's produce paid to them by each cultivator." The other class was not so much dependent on the community, and their services were required occasionally and they were paid by job, for the quantity of the work they did for the villagers. The prosperity of both thus

depended ultimately on the prosperity of the agriculturists. "The fortunes of the whole village depended upon the one important fact—the nature of the agricultural season."

Viewing this system as a whole we see that the village economic organization gave a peculiarly compact form to the Indian village community. There was no specialization, hence no great proficiency and only limited division of labour, with no external competition, and an entire absence of localisation of industries. For these reasons it may be argued that the state of Indian rural industry was very backward.

We have thus seen that the predominance of agriculture, self-sufficiency, absence and difficulty of transport, and imperfect division of labour, were the chief characteristics of the Indian village organization. Besides these we may also note the following general economic features of the villages :—

(a) Absence of money economy. Grain and land were the two chief standards of value which were used by the villagers in their few bargains and exchanges. The need of money was rarely felt.

(b) Conservatism of the people, with the resultant immobility of labour, also caused by the lack of means of transport and the hold of the caste system.

(c) Greater influence of custom and status and the comparative absence of competition and contract. We may here notice the influence of custom and status on the different economic relations of the village communities, *e.g.*, wages, rent, prices.

Both of these forces—custom and status—have been very strong in India, from time immemorial. One has determined the social status and the economic position of a man and the other has regulated his actions in one unalterable path. The rents paid by the cultivators to the landlords were largely customary. The circumstances of political insecurity and perennial warfare in those days probably established such an equitable and mutually profitable relationship between landlord and tenant, which varied little from generation to generation. As regards wages, to the very small extent to which labour was hired at all for cultivation, the remuneration was regulated by custom. In the case of the servant-artisans, known as the 'Kamins' in the Punjab we have also seen that they were paid customary dues for their services. About prices it was very seldom that payments were made in money. If ever they were to

to be made, custom was sufficiently powerful to regulate them, as there was no other force to intervene.

Towns. In contrast to these characteristics of the village organization, we may also point out here, some main features of the urban life of the day, about which we have already made some mention.

1. The population of the towns was much larger than those of the villages. Corn was not produced in the towns but brought from neighbouring villages.

2. There was a larger variety of trades and occupations in the town than was to be found in the villages.

3. The use of money for settling payment was quite common. The use of credit was also developed.

4. Marketing arrangements were more efficient and better organized in the towns.

Indian Industries in the Past. It has already been mentioned above that the main industrial occupation of the country was confined to the small number of towns, while villages were more or less agricultural units. But if we desire to take a general view of the Indian industries in the past we shall have to include in our survey the unorganized village industries also, which were in the hands of the village artisans, and were of an undeveloped and antiquated nature, and stood in a marked contrast to the urban handicrafts.

An objection may be taken against the use of the term 'industries' in this connection as the industrial activity of that time was not the one implied in the modern sense of the term, but it may be argued that until recently, before the advent of the so-called Industrial Revolution in the west, even England and the other highly industrialised countries of to-day were in the same position as India was. Almost everywhere there was the stage of handicrafts and cottage industries, the former being confined to the urban areas only and the latter found in villages or manors, and were concerned with the primary needs of man.

The urban industry was concerned with the production of higher class of products for the aristocracy, and her manufactures found a ready market in many foreign countries. Caste system, and the system of joint family being prevalent, the artisans inherited from their ancestors or acquired by experience a dexterity and skill and delicacy of touch which was not surpassed by artisans of any other country. Not only did they supply the people with the articles of necessity—textile, woollens, metalwares, but they

turned out works of art of great excellence. The ship-building industry, it is related, was in such a highly developed state as to excite the jealousy of the English ship-builders.

The Industrial Commission (1918) observes : "At a time when the west of Europe, the birth-place of the modern industrial system, was inhabited by uncivilized tribes, India was famous for the wealth of her rulers, and for the high artistic skill of her craftsmen and even at a much later period, when the merchant adventurers from the west made their first appearance in India, the industrial development of this country was, at any rate, not inferior to that of the more advanced European nations." After all what was the underlying cause of the sudden awakening among the European nations to direct their energies towards India, and to engage in a serious rivalry for attaining political supremacy over the country ? It was the desire to get a complete hold over the best industrialised country of the time, and then to exploit all her resources, natural as well as human, to the best of their advantage.

It was a natural result of this political rivalry amongst the European nations for capturing India, and the consequent success of the British, that we at once reach a stage in the economic life of our country where we find a rapid decline both in artistic excellence and economic importance of these handicrafts leading all of a sudden to the total ruin of almost all the highly advanced indigenous industries.

II. Disintegration of the Old Order. We now proceed to discuss disintegrating influences which caused a destruction of the old order in our country without leading us to the next natural step.—Industrialisation on modern lines, but dragging us to a peculiar state of affairs not resembling the New Order.

The breaking up of the old order all over the world was due to those natural processes of evolution in the domain of production which more or less brought a very sudden change from the handicraft stage to the age of machines. The history of the various stages of the Industrial Revolution, as the changes are collectively called, is a conclusive proof of it. By the adoption of methods which saved labour or material and by the utilization of by-products, goods began to be turned out at a much cheaper cost. Machinery supplanted hand-labour, large amount of capital began to be invested in every industry, production on a small scale gave place to

large scale production and a better organisation was introduced. This was the advent of the new order.

The new forces changed the entire economic structure of the world. India was no exception to this. The main reasons which brought this country under those influences were the following :—

1. The establishment of the British rule with all its economic and political consequences,
2. The establishment of the new revenue system and the new judicial administration—a corollary to the above,
3. The opening up of the country as a result of the construction of roads, railways and better organization of water-ways,
4. The growth of “ money economy”,
5. The introduction of competitive system of wealth-production and the establishment of factories,
6. The spirit of competition and love of economic liberty inculcated by western civilization and education.

These factors combined with the simultaneous opening of the Suez Canal ushering in nearer and easier steamship routes brought the Indian markets, and the Indian supplies of raw materials closer to the west, and brought Western methods of production and exchange in Indian industry and trade.

The urban industries were the most hard-hit by the introduction of the above factors into India. Although their decline, in some cases, began about the end of the eighteenth century, yet it became very marked about the middle of the nineteenth century. This can be attributed to the following causes :—

1. The disappearance of the courts of Indian rulers.
2. The establishment of an alien rule bringing with it many foreign influences unfavourable to the existence of urban handicrafts,
3. Competition with a more highly developed form of industry of the west.

The disappearance of the patronage of courts and the aristocracy meant a huge fall in the demand for the product of the handicrafts. The introduction of the British rule weakened the power of the craft guilds. This resulted in the following evils :—(i) adulteration of materials, and (ii) shoddy and slovenly workmanship. This led to a decline in the value of the wares. The process was further accelerated by the selfish commercial policy of the East India Company and the British Parliament who dis-

couraged Indian manufacture in the early years of British rule in order to create a large demand for the rising manufacture of England. The policy which they pursued resulted in making India the producer of raw materials for the factories of Great Britain and consumer of the cheap manufactures of these factories. This left no scope at all for India to start on the path of industrial progress. It has been remarked that "The British manufacturer employed the arm of political injustice to keep down a competitor with whom he could not have contended on equal terms."

The revolution in transport in India caused by the rapid construction of roads and especially railways opened out many parts of the country to imported goods even in the remote interior, and thus intensified the force of competition. The country's artisans had to abandon their traditional occupations in their thousands.

The Government not only did not lend a helping-hand to the struggling handicrafts but sometimes went out of their way to give direct assistance to English manufacturers in exploiting the Indian market. Ranade wrote: "This dependency (India) has come to be regarded as a plantation, growing raw produce to be shipped by the British agents in British ships, to be worked into manufactured articles by British skill and capital, and to be re-exported to this dependency by British merchants to their corresponding British firms in India and elsewhere."

What was then the effect of all these forces on the Indian producer? He had only two courses left:—(i) either to change his industrial methods, and turn out cheap wares of doubtful artistic value but commercially paying, (ii) or to keep to his old standards and face decay—slow or rapid.

But a review of what actually happened shows that the disintegrating forces acted so rapidly as not to give any time to the artisan to adapt himself to the new circumstances. He had no other alternative left but to fall back upon agriculture as his occupation. There were no large scale industries which could absorb this newly created surplus labour population. This increased the pressure of population on land, and further emphasized the rural character of the country. Thus the forces generated by the Industrial education led to the decay of our indigenous industries and the ruralisation of the country. "That is why we have remarked that whereas the old order was being destroyed in this country, no provision was made for the ushering in of the modern industrial activity. On the other hand every

effort was made by our rulers to paralyse our old industrial activity, and to discourage every step that might lead to the development of our vast natural resources on modern industrial lines.

As regards the effect of these new influences on our villages, the following may be noted :—

1. The rural self-sufficiency and isolation are fast disappearing. The increasing dependence of the village on the outside world is sufficiently marked. It has been a natural outcome of the contact with western civilization. Many articles of daily use—the products of machines and factories which were unknown a century back, have found their way into the village.

2. Due to improved means of communication and transport, liability of the country to famines has been considerably reduced and an efficient system of famine relief has been evolved.

3. Money economy has taken the place of barter or payments in kind. The growth of trade and transport and the greater facilities for purchasing almost everything from the village itself, led to a greater use of cash payment because of its convenience.

4. The village population has become more mobile. New ideas of individualism, fostered by the impact of western education and further encouraged by the emergence of a desire for better and richer life, made people migrate from villages to towns where they could find a greater scope for achieving their higher ideals. The old ideas of conservatism, fixity of occupations, hold of caste system are all being changed and modified to suit the modern requirements of life.

5. The economic relations are now more and more governed by contract and competition. The influence of custom and status is gradually crumbling. The phenomenon is more apparent in towns than in villages, although in the latter also the modern ideas of competition and contract have made their headway. Rent, wages and prices—the three economic relations which we found to be decided by custom and status in the old order—are now influenced by competition and contract.

6. Production in the village is no longer determined by local demand only. It is now to a large extent influenced by the conditions of foreign markets. This change has been termed, the 'commercialization of agriculture'. This is apparent from the gradual extension of commercial crops, and the specialization of certain crops in

certain areas. The increase in trade and transport facilities, and the expansion of irrigation works have further helped the advent of the new forces. This change greatly benefited the producer, as it brought a slightly better distribution of crops and increased the profits of cultivation. The other two tendencies, *viz.*, (a) Dispossession of old proprietors and (b) Excessive sub-division and fragmentation of holdings, however, affected the ordinary cultivator adversely. The growth of population and the absence of large-scale industries were largely responsible for these results.

7. The position of the village artisans, however, has not undergone any considerable change. The village still possesses the same equipment of artisans. Most of them today are paid customary dues; the payments are still mostly in kind. But the direction of change is definite. The tendency has not been towards the abolition of the dues and services outright; but the customary dues are playing now a much less important part in the income of the artisan than they used to. Again the artisan has become today more ready to migrate. There is also a movement towards payment for 'job' rather than for 'yearly service'. The transition is not complete yet.

The products of Indian factories and foreign imports have affected more seriously artisans like the weaver and the oilman, who have been hard hit by the introduction of cheaper and better varieties of machine-made goods. For artisans thus affected there are generally two alternatives open: either to join the ranks of day labourers, or to migrate to towns in search of employment.

So far we have discussed the effects produced by the forces of the New Order on the existing characteristics of our old economic order. We now take to two more phenomena which have resulted as a direct consequence of the advent of the new order in India. They are:—

(i) The growth of foreign trade—imports as well as exports,

(ii) The growth of new towns.

Both of these features are regarded as undeniable signs of industrial progress of a country under modern conditions.

(1) **Rise in Trade.** A study of the statistics of foreign trade bearing particularly on the proportion of manufactured goods in the imports and exports shows that "both exports and imports have increased largely with the growth of the country's wealth and population....."

Some authorities conclude from such data that the tendency towards industrial progress in India is unquestionable and is growing with the passage of time. But there are some objections to such a view which leads others to hold that the rise in the statistics of foreign trade is not a sure index of India's industrial progress. A steady increase in the exports of manufactures and a similar decline in manufactured imports point out the trend towards industrialization of the country.

(2) **Growth of Towns.** The table of urban and rural percentage of the census of 1872 to 1931 fails to suggest any considerable movement towards the growth of towns in India. This would indicate if anything, an economic stagnation of the country. For this we first consider the different forces leading to the growth of towns, which have been in operation in India during the last half a century or so :—

(i) Railway construction leading to creation of new trade centres,

(ii) Establishment of new industries, and a further growth of old industries,

(iii) Famines, which tend to decrease rural population, making people migrate to urban areas,

(iv) Creation of a landless labouring class, migrating to towns,

(v) Tendency of wealthy landlords to live in towns.

In a sharp contrast to these we should also note the following forces which go in the opposite direction, *i. e.*, decay of towns :—

(i) Diversion of trade routes into different channels,

(ii) Decay of old urban handicrafts,

(iii) Epidemics,

(iv) Insanitary and unhygienic conditions in towns.

Next to this we consider the question of the growth of large cities at the expense of smaller towns. This is caused by the following forces :—

1. Concentration of trade in bigger centres,

2. Lagging behind of wage rates in smaller towns,

3. Centralization of administration and the resultant concentration of administrative population in head quarters.

It should be noted that in India the growth of organised industries has been taking place very slowly. Whatever little growth in towns there has been it is due much

more to the growth of commerce rather than of industry.

(3) **The New Order.** It would be instructive if we give at this stage the list of economic features which have been given by Morison as the characteristics of the New Order. This would help us in estimating to what extent India has entered the fold of the new order. These characteristics are :—

- (i) Freedom of contract and free play of competition,
- (ii) Close interdependence between the different parts of the industrial world made possible by highly developed means of transportation and communication,
- (iii) A comparatively even distribution of the population among the various occupations, with agriculture occupying a relatively unimportant position, and the consequent predominance of the urban over the rural population,
- (iv) A more complex and perfect division of labour facilitated by the wide and growing extent of the market and the large and increasing use of machinery,
- (v) Industry organised on a large scale, requiring the use of huge capital resources and directed by a few expert entrepreneurs ; concentration of labour in large factories and manufacturing centres and the disappearance of personal relations between the workmen and the capitalists,
- (vi) Displacement of barter by money economy,
- (vii) Development of credit and banking, and absence of usury.

Keeping in view the extent of the above mentioned changes that have occurred in the economic life of the country, we come to a double conclusion ; first, that India at the present time exhibits in varying degrees characteristics of both the types of countries — those of the old order as well as those of the new order. There still exist in her economic activities such factors as are mediæval, if not primitive, side by side with those factors which exhibit a full development of economic conditions found in the highly industrialised countries of the world. The trend of development is however towards a growing predominance of the features of the new order. Secondly, that not only is the total extent of the industrial progress small, but also the position of agriculture as the first and foremost industry of India is strong as ever, and in the total growth of population in the country the agriculturist still maintains his old position. The very slow growth of the new industries, and the

partial decay of old ones, the increasing pressure of the population on land, and the very small progress made in agricultural development — these are the main changes that have come about. The only considerable change that has occurred has neither been in agriculture nor in industry but in trade. The methods of trading have been revolutionized, external and internal trade, and the volume of both has increased enormously. But the progress of industry has not gone hand in hand with this commercial revolution. The industrial evolution in this country however has followed almost the same lines as it followed in other modern industrial countries. The only thing, then, remarkable about the Industrial Evolution of India has been its slowness.

When we compare the progress of industrial activities in India with those in the west we find that in the western countries the rise of industrialism was marked by three features namely, rapidity, magnitude and width of range. The industrial progress grew as rapidly as it was of a high magnitude and spread over a vast area—almost over all the existing industries. In India, on the other hand, it has not only been slow but also of a small magnitude affecting a small range of our wants.

We conclude that India is in a state of Economic Transition. The methods of production are being modernized, exchange is being developed leading to large markets, the problem of determining the share of the factors of production is becoming very difficult and the range of our wants is rapidly widening.

SUMMARY

The present-day features of Indian economic life are not exactly what they were in the past. Here also, as in other countries, there has been a process of change in this respect. The conditions that existed before are termed as the characteristics of the 'Old Economic Order', and those of the modern age as characteristics of the 'New Order'. The advent of the new order has been the result mainly of the Industrial and the agrarian revolution in the west. In India in the 'Old Order' period the most important factor was the self-sufficient village community, with agriculture as the chief occupation. Towns and industrial activity—rural as well as urban—existed to a limited extent. Towns were generally known for one or the other developed industrial vocation but their existence was because of some other factors and not merely industrial activity.

The position of the village was of a mediæval type. The inhabitants comprised the agriculturists, the village officers and the artisans. The nature and scope of cultivation was limited as

except sugar and cotton, everything was usually produced everywhere for local consumption. The means of communication and modes of trade being still undeveloped each village enjoyed a self-sufficient aloofness from the outside world.

Viewing the system as a whole it is remarked that predominance of agriculture, imperfect division of labour, self-sufficiency, difficulty of trade and transport, absence of money economy, conservative habits of people, influence of custom and status, comparative absence of competition and contract were its chief features. The towns were in a way in a better developed condition engaged in a variety of industrial vocations with little agricultural activity. Cash payments were made; marketing and credit-system was developed. The urban industrial products were usually meant for higher classes and were generally of a higher skill and workmanship. As opposed to these the village products were of a less developed skill and antiquated nature meant to satisfy the local needs only. The whole activity as one, "was, at any rate, not inferior to that of more advanced European nations".

The influence that began to break up this old order was a result of those natural processes of evolution in the economic life of a nation which more or less brought a sudden change from the handicraft stage to the machine age. The advent of industrial revolution, as it is termed, with the consequent development in trade and transport had its effects on India too. The main agency that brought about this change here was the establishment of the British rule which opened up the country, as a result of constructions of roads and railways, to collect all the raw materials from all parts of the country. These were sent to the mother country which sent finished goods for Indian markets. The immediate effect of this new kind of trade was the decline of urban industries. This decline in urban industrial activity resulted in artisans falling back upon agriculture or enlisting themselves as hired labourers in villages.

The village economy was also affected in many aspects: self-sufficiency began to disappear; means of transport developed; money economy became prevalent; village population became mobile; forces of contract and competition appeared; production increased beyond local requirements; agriculture became commercialized; status of artisans was affected.

Besides these processes two more changes occurred; the growth of foreign trade, and the development of towns. About the expansion of foreign trade it can be said that by itself it is not a test of India's industrial prosperity.

India is now exhibiting in varying degrees characteristics of both the orders of economic life, and the industrial progress she

has achieved is very limited. The pace of industrialization in India as in other countries has neither been rapid, nor wide nor of any considerable magnitude. Agricultural activity in rural areas, still goes on in its old hackneyed manner. Thus we say that India is in a period of economic transition.

QUESTIONS ON CHAPTER V

1. What are the most important characteristics of the village economy in India? What forces led to its decay?
2. Account for the decay of the old indigenous industries in India.
3. Could the decline of Indian industries after the Industrial Revolution in England have been prevented? If so, how? (P. U. 1926)
4. What are the effects of development of communications on the internal economy of villages? (C. U. 1928)
5. "City India stands separate from rural India." Examine the signification of the above. (C. U. 1921)
6. In what respects does the old economic order differ from the new in India? What is the present position of India in that respect?
7. What is the practical significance of the distinction which is sometimes made between agricultural and industrial provinces in India? (P. U. 1932)
8. Characterise "the economic transition" in India. (P. U. 1914)
9. Distinguish between Economic Transition and Industrial Revolution. Which of the two terms is appropriate in the case of India?
10. From the nature of the economic changes going on in India what can you say about the extent of India's industrialization.

CHAPTER VI AGRICULTURE

Problems and Factors of Production

I. Introductory. Agriculture occupies the foremost place in the Indian economic life. As much as three-fourths of the population still adhere to their ancient occupation of agriculture after the ancestral method and organisation, producing all the food grains for home consumption as well as for foreign exports, and the raw materials for manufacturing industries. This shows that agriculture still remains by far the most important industry in India, and India will for a long time to come, be more of an agricultural than an industrial country. For the economic welfare of such a country the prosperity of agriculture should be our first concern.

Moreover in one way or the other, whether directly or indirectly, the success of Indian manufactures, the improvement in the economic condition of the masses, and a rise in their purchasing capacity for home manufactures, the favourable balance of our foreign trade, and lastly the financial stability of Government of India and the various local governments, in a great measure depend upon the success of agricultural economy of India. But in spite of all this conditions of our agriculture leave much to be desired. Why is Indian agriculture so depressed and backward?

In its every aspect—land, labour, capital, and organisation—Indian agriculture suffers from one malady or the other with the inevitable result of under-production, and low out-turn. (Excessive pressure of the population on land, small-sized holdings and their progressive fragmentation, primitive methods of cultivation, waste of manures, insufficient and uneconomic utilization of women's services, lack of finance for farmwork, old fashioned character of the subsidiary occupations, crushing indebtedness of the peasant, under-employment, universal illiteracy and phenomenal poverty, are some of these maladies.) That is why agriculture has been termed a 'depressed industry of India'.

Again when we turn our attention to the present position of agricultural development and progress achieved by other countries of the world, *i. e.*, Australia, Russia, Canada, we find that all over the world more and more interest is being exhibited in matters of improving agriculture on modern scientific lines with the help of the latest chemical and mechanical processes. In India the average cultivator tills his land still with the ancient classic plough, without the help of any form of modern machinery. This proves the resourcelessness of our agriculturist.

Improvements in agriculture will necessarily imply a growing mechanization of its processes and may bring into existence manufacturing concerns in the country producing agricultural tools and machinery.

Before we take up the discussion of the present position and defects of our agricultural economy along with the suggested remedies for its improvement, a note of warning is necessary : while concentrating fully on the agricultural problems of our country we should in no case become oblivious of the necessity of its industrial development, because ultimately it is her industrial progress on which India's economic salvation depends. Even in the domain of agriculture effective improvement will be impossible unless by developing industries excessive pressure of population on land is relieved.

II. **Land.** Land is the most important factor in agriculture. Let us now study some facts and figures relating to land in India. The following tables relate to the area and its distribution for agricultural purposes :—

TABLE A

	Million acres		
	1901-2	1913-14	1933-34
Net area by professional survey	552'92	619'59	667'37
Net available for cultivation	137'96	147'16	144'65
Area under forest	66'36	82'62	89'07
Fallow land	42'15	52'62	47'45
Cultivable waste other than fallow	107'52	115'58	153'59
Net area sown with crops	199'71	219'19	232'10
Total sown area (includes areas sown more than once)	220'35	.....	267'02
Area irrigated	32'58	46'83	50'51

TABLE B

PRO- VINCE.	CULTIVATED			UNCULTIVATED		
	Net area Million acres	Net area actually sown (Million acres)	Current Fallow (Million acres)	Cultivable waste other than fallow (Million acres)	Net avail- able for cultivation (Million acres)	Forests (Million acres)
Madras	91'00	33'87	10'88	13'18	19'88	13'69
Bombay	78'88	33'25	10'26	6'58	19'52	9'27
Bengal	48'55	24'00	4'76	6'26	8'42	4'61
U. P.	67'97	36'01	2'50	10'28	9'90	9'28
Punjab	60'17	28'68	2'46	14'20	12'86	1'97
Bihar and Orissa	53'13	24'18	6'93	6'95	8'01	7'06
C. P. and Berar	64'09	24'99	3'79	14'11	4'95	16'27
Assam	35'48	5'88	1'89	19'21	4'57	3'95

Table A indicates that the available area for extending cultivation is limited, as the amount of area sown has not been increasing very rapidly during the last 30 or 35 years.

From the Table B it appears that there might be some scope of extending cultivation to some extent in the provinces of Assam, the Punjab and the Central Provinces. But again on a closer examination of the two tables, the conclusion is forced on us that only a slow progress has been made in that direction. This slackness may be supposed to be due to the large size of agricultural population already existing in our country and the system of small and fragmented holdings, but it is more largely due to certain other difficulties which are more or less peculiar to different provinces. In provinces like the Punjab and the C. P. it is a question of extending irrigational facilities which involve not only financial but also physical difficulties. In Assam hindrance is not only of an unhealthy climate but also of uncongenial conditions for labour supply, which put a great limitation upon recruiting the required labour.

A better solution of our difficulties consequently lies in the direction of intensive cultivation in India on modern scientific lines. For this purpose let us first study the following tables :—

1. Average yield per acre of the principal crops in India in 1918-19, 1923-24, 1933-34.

2. Yield per acre in 1922 in India and other countries.

TABLE 1

Crop	1918-19	1923-24	1933-34	Crop	1918-19	1923-24	1933-34
		(in pounds)				(in pounds)	
Rice	701	798	834	Linseed	265	278	261
Wheat	707	694	581	Rape	351	416	353
Sugarcane	1,897	2,544	3,450	Mustard			
Tea	561	528	470	Sesamum	174	192	193
Cotton	76	87	84	Groundnut	997	867	922
Jute	1,195	1,164	1,292	Castor-seed	...	207	209
	(1918)	(1924)	(1934)			(1924-25)	
Coffee	183	139	184	Rubber	115	121	141
	(1919-20)		(1932-33)		(1919)	(1924)	(1930)

TABLE 2

Country	Wheat (bushels 60 lb.)	Corn (56 lb.)	Barley (48 lb.)	Rice (lb.)	Cotton (lb.)	Tobacco (lb.)
Canada	17'8	43'4	27'6	...	...	...
U. S. A.	13'9	28'3	24'9	1090	141'0	735'6
England	31'2	...	31'0	...	...	...
Denmark	39'0	...	45'6	...	...	...
France	18'6	16'0	23'9	...	...	1426'1
Italy	14'1	20'2	14'3	2151	...	917'9
Germany	20'5	...	25'7	...	...	2639'2 (1921)
Egypt	24'1	36'3	30'1	14'56 (1921)	299'0	...
India	13'0	15'6	19'8	911	98'0	...
Japan	22'5	27'7 (1921)	31'7	2177	...	...
Australia	11'2	25'7	21'3 (1921)	...	...	...

Causes of Low Productivity. A study of these tables shows the comparative poor yield per acre of the Indian soil, a characteristic defect of our agricultural economy. The enormous difference in the yield per acre in India and that in other countries is the result of the highly unsatisfactory conditions under which land is cultivated here, which stand in a marked contrast to the better organization and methods followed in other modern countries.

Of the many causes of such a low productivity in India we should consider the following :—

1. Under-equipment of the agriculturist and his conservatism,

(i) Lack of scientific and technical knowledge,

(ii) Absence of machinery and other mechanical processes,

(iii) Scarcity of capital,

(iv) Use of ancient tools,

(v) Bad selection, admixture and adulteration of seeds.

2. Fragmentation and subdivision of holdings, which minimise all the possibilities of increasing output.

3. Vagaries of climatic conditions having an injurious effect upon crops :—

(i) Uncertainty and deficiency of rainfall and its irregular distribution,

(ii) Restricted supply of soil moisture, as rain water passes rapidly over the soil without having enough time to soak into the sub-soil,

(iii) Floods, hailstorms, frosts etc.,

(iv) Wild animals, rats, locusts and other pests add to the damage done by the above factors.

4. Deficiencies of the soil :—

(i) Soil wanting in phosphoric acid, nitrogen, and other organic matter,

(ii) Inadequate supply of manure,

(iii) Fertility of the soil confined to the very little portion of the upper surface.

In this connection we might also study an allied but controversial problem—the problem of the progressive deterioration of the soil in India. It has given rise to a great controversy both amongst the expert authorities and the economists of the country. The superficial observers and critics hold that the fertility of land is gradually getting exhausted, deducing this conclusion from the progressive diminution in recent years in the average yield per acre of certain crops. Further they say that a country like India must have an excess of exports over imports so as to be able to pay the Home Charges; and to increase the exports more has to be produced from land with the inevitable result that the soil cannot but slowly and surely get exhausted and it deteriorates especially when very little is put back into it by way of manure.

But a closer study of the causes leading to the lower fertility of the soil shows that it is not so much due to any apparent deterioration of Indian soils as to some of the following factors :—

(a) Extension of cultivation to poorer lands, which make the average yield per acre go down,

(b) Relegating food grains to inferior soils so as to cultivate some profitable commercial crops like jute, and cotton on better soils,

(c) Decrease in the area under periodical fallows and increase in the total areas cultivated without greater use of manures.

From amongst the views of expert authorities on the problem we find that two of them *viz.*, Clouston and Moreland, believe that the apprehension of the exhaustion of the soil in India is only illusory, and that we may only consider it in connection with a limited area of the poorer lands brought under cultivation, which are deficient in phosphates or nitrogen. The former wrote :—

“Most Indian soils must have reached their maximum state of impoverishment hundreds of years ago, and will not

get any poorer even if cropped without manures for hundreds of years more."

Although Dr. Voeleker, another expert authority, holds that the soil suffers progressive exhaustion as the soil constituents once removed are never replaced, yet he qualifies his statement by asserting that a natural recoupment of the soil occurs to some extent due to the cultivation of a large proportion of the leguminous crops which help the soil in deriving nitrogen from the atmosphere.

Another authority, K. L. Dutta, after weighing all the pros and cons of the matter comes to the conclusion that "there is no statistical evidence to show that any change has taken place in the fertility of agricultural land in any part of India, either during the period under enquiry (1890-1912) or even during a much longer period." The view of the Royal Commission on Agriculture in this connection is that the losses of the soil as a result of intensive cultivation are compensated by such natural causes as moisture, floods etc. But this statement has been made without any statistical background.

The final conclusion consequently is that a comparatively low yield per acre of our crops is quite apparent, and whether it is due to soil deterioration or not is a highly technical discussion. We should, however, take a proper care of our soil, so as to increase its productivity.

III. Some Problems of Land. In suggesting measures which will increase the yield per acre of our crops we shall consider some problems of land and labour as affecting production. As regards land we shall deal with the following problems :—

- (a) Sub-division and fragmentation of holdings,
- (b) Irrigation,
- (c) Manures,
- (d) Other miscellaneous improvements.

(a) **Sub-division and Fragmentation of Holdings.** "One of the many causes responsible for the backwardness of agriculture in India and the impoverishment of the ryot is the endless sub-division and fragmentation of land."

By sub-division we mean that the ancestral piece of land has been divided into small portions, mainly on considerations of heredity and inheritance, while the term fragmentation connotes the idea that each sharer's holding is not confined to one compact block as a result of the above division, but consists of a number of tiny parcels lying scattered at distances one from the other. These two

phases of the agricultural holdings in India are so correlated as to accompany each other in every case. This results from the fact that at the time of division each sharer insists on obtaining a fractional fragment of each kind of land in every plot instead of getting one piece at one place.

The two evils have been growing with the passage of time, and as Dr. Harold Mann observes, "In the pre-British days, and the early days of the British rule the holdings were usually of a fair size, most frequently more than 9 or 10 acres, while individual holdings of less than 2 acres were hardly known." The following table shows the average acreage of land cultivated by a farmer in different provinces according to the 1921 census :—

PROVINCE	ACRES	PROVINCE	ACRES
Bombay	12·2	Bihar & Orri-	
Punjab	9·2	sa	3·1
C. P. &		Bengal	3·1
Berar	8·5		
Burma	5·5	Assam	3·0
Madras	4·9	U. P.	2·5

It is more or less a bare statement of facts. On closer examination one finds that the problem is very acute in many places. What is more alarming is the fact that the size of holdings in the several provinces of India is becoming smaller day by day, and fragmentations becoming worse and worse.

In his evidence before the Royal Agricultural Commission Keatings observed, "The agricultural holdings of the Bombay Presidency have to a large extent been reduced to a condition in which their effective cultivation is impossible." It may be added here that conditions in other parts of the country are not very different. In the Punjab 17·9 per cent. of the owners' holdings were found to be under one acre, further 25·5 per cent. were between one and three acres, and only 18 per cent. had between five and ten acres. In a South Indian village it was found on enquiry that 156 owners had between them no less than 729 plots of which 463 were less than one acre. In another place the size of individual plots was sometimes as small as '00625 of an acre or 300 square yards. About intensive fragmentation in a Punjab village it was found that 34·5 per cent. of the cultivators had over 25 fragments each. Moreover the Punjab fields have been found over a mile long, but a few yards wide.*

* 1. Jathar and Beri 'Indian Economics' Vol. 1.

An inquiry* into the sub-division carried out in 1934 and 1935 in Mysore revealed the following results :—

Sub-division of holdings investigated in 80 villages in 18 taluks showed :—

(a) Less than 1 acre	20.9	per cent.
(b) Between 1 acre and 5 acres	39.8	„
(c) Between 5 acres and 10 acres	18.8	„
(d) Between 10 acres and 25 acres	14.9	„
(e) Between 25 acres and 50 acres	4.1	„
(f) Above 50 acres	1.5	„

It is clear from the above figures that holdings of the size of 10 acres and below form 79.5 per cent.

The Census Report of 1931 for British India states, "If a comparison be made between the area of land under crops and the number of agriculturists actually engaged in cultivation, the result found for British India is that for each agriculturist there is 2.9 acres of cropped land, of which 0.65 of an acre is irrigated.

"The corresponding figures of 1921 are 2.7 and 0.61. If however we take only the figures of owner and tenant cultivators, excluding rent receivers, agents and agricultural labourers, we find that each cultivator has 4½ acres to cultivate and of irrigated land, excluding in this case the jhumiyas (cultivators of shifting areas), each cultivator has just over an acre."

Causes of Uneconomic holdings. If we try to analyse the causes supposed to be responsible for this uneconomic phenomenon, we come to the general conclusion that whereas the population of the country has been increasing rapidly, neither the net area of cultivated land has increased in the same proportion nor the industrial development of the country has been proceeding adequately. Combined with these, the peculiar laws of inheritance and the gradual growth of the spirit of individualism fostered by the modern ideas of private property and individual privilege in the country, have ultimately led to the inevitable result of sub-division and fragmentation of agricultural holdings.

Such sub-division is said to obtain in other countries as well but the big and material difference in India's case and that of other countries lies in the fact that whereas in those countries the divided holding is only a part of the

*Indian Journal of Economics ; January, 1938, article written by V. L. D. Souza.

owner's means of livelihood, in India it is often the sole source of employment throughout the year. That is the main cause of poverty and the comparatively lower standard of living of the peasants in this country, and this has become a serious problem in recent years.

Fragmentation Defended. Some people have tried to make out a case for fragmentation and sub-division by adducing the following arguments :—

1. Sub-division leads to a widespread distribution of landed property and the creation of a large class of peasant-proprietors, thereby minimizing the danger of multiplying the number of landless labourers.

2. Fragmentation serves as a sort of an insurance against the uncertainties of seasons and helps the cultivator in the rotation of crops as well as in keeping him at work for more days in the year.

Fragmentation much more harmful than useful. Examples can be cited establishing these economic advantages of fragmentation, but a study of the problem with a more practical outlook makes us believe that sub-division and fragmentation are more uneconomic than advantageous, especially in their present form in our country.

Evils of small and fragmented holdings. The cultivation of an unduly small holding entails waste in a variety of ways :—

(i) Even such poor equipment as a pair of bullocks and a plough becomes a costly affair, and the money spent on such investment may not be realized by the cultivator out of his profits, if he gets any as a result of his small holding.

(ii) Likewise the cultivator cannot incur the expenditure for fencing his fields, thus going without any protection from the invasion of weeds, stray cattle and thieves.

(iii) Then there is the physical difficulty of making the bullocks turn round while ploughing.

(iv) Employment of some of the modern labour saving devices as tractors, threshers, winnowers etc. is not possible.

(v) There is a considerable waste of land in making hedges, paths etc.

(vi) Digging a well means extremely disproportionate expenditure considering the small size of the holding.

Along with these there are some defects which are peculiar to fragmentation, as :—

(a) It is an established fact that there is a greater expenditure of capital and labour and a smaller return in case of one's holdings being scattered than if they were in the same area in one compact block.

(b) The cultivator is unable to stay on his holding, and going from one field to another means waste of time, labour, cattle-power and manure.

(c) It causes endless enmity and litigation among owners of adjacent holdings based on disputes or quarrels over such matters as :—

1. Short-cuts through other people's fields,
2. Boundaries,
3. Rights of way.

(d) Irrigation also becomes a difficult and wasteful process. The supplying of water to very tiny pieces of land is more or less impracticable, as this cannot be done without running channels through other people's lands which may not be allowed.

All these drawbacks have been summed up as : "This destroys enterprise, results in an enormous wastage of labour, leads to a very large loss of land owing to boundaries, makes it impossible to cultivate holdings as intensively as would otherwise be possible, and prevents the possibility of introducing outsiders, with more money, as tenant farmers or as purchasers of a good agricultural property." In short, fragmentation is a very serious obstacle in the way of improving our agriculture.

Proposals for remedying sub-division and fragmentation. The question is then how to eradicate this evil ? In enumerating remedial measures which will remove the evils we should bear in mind two things. First, that we should go to the very root of the problem in order to face it in a practical way, *i. e.*, efforts should be made to remove all the causes extant which perpetuate fragmentation and sub-division. Second, that we should pay heed to the variety of ways in which the problem has been tackled in other countries. And then there is the undeniable fact that the two phenomena will have to be treated separately in this connection.

Taking the case of fragmentation first, which is easier to be remedied than sub-division, we find that the activities of the Co-operative Department have achieved some success in this direction especially in the Punjab, which is

supposed to be exceptionally well-suited for it, mainly for three reasons :—

1. Villages are homogeneous here,
2. The task is easier in the Canal Colonies,
3. Comparative simplicity of tenure further makes the task more convenient.

The method adopted is to consolidate tiny blocks of lands into larger plots thus decreasing their number and to some extent increasing the size of each holding. Consolidation is in effect the substitution by exchange of land of a compact block for a number of scattered fragments. But all these achievements have resulted after a good deal of peaceful persuasion and patient propaganda, which is the underlying principle of this kind of work. Although the officials have always regarded the obligatory force of legislation as essential in such cases, yet, on the other hand, it is necessary to consider the opinions and prejudices of the people thus affected. Compulsion, however, may have to be used in the case of a recalcitrant minority. Many evils of fragmentation have thus been removed with the resultant increase in the productivity of land and the quantity of the area sown.

The Punjab Consolidation of Holdings Act of 1936 provides that, if not less than two-thirds of the landowners in an estate or a sub-division of an estate, holding not less than three-fourths of the cultivated area, make an application for the consolidation of their holdings, the application shall be deemed to be an application on behalf of all the landowners, and that, if any scheme of consolidation is confirmed by the same majority, it shall become binding on all the landowners and their successors.

Coming to the evils of sub-division, we find that there is no easy and convenient solution of this problem. We have already referred to the fact that the population of the country has increased with a progressive decline of the old indigenous handicrafts and without any scope for industrial occupation in the urban areas. Thus the problem of sub-division of agricultural holdings has become aggravated, through the increase in numbers who, finding no other source of livelihood, have to share the joint cultivation of the ancestral piece of land.

A change in the laws of inheritance or bringing into force the law of primogeniture has been suggested as an effective measure to overcome the above difficulty.

On analysing the implications of this suggestion we find that it will mean the dispossession of a large number

of people of landed property with the consequent problem of finding employment for this landless class. It is in this connection that we deplore the apathy of our present government with regard to the rapid industrialization of the country. The encouragement of some of the rural cottage industries may absorb some of those dispossessed holders, but unless the very basis of our present-day economic organization is changed, we may not expect to arrive at a comfortable state of equilibrium.

As regards the experience of other countries like France, Belgium, Japan, Germany it may suffice to note that remedial legislation is ultimately essential as voluntary agreements amongst the peasants and agriculturists do not solve the problem completely. Such legislation has been based on the following principles :—

- “(i) Compulsory expropriation of existing holders.
- (ii) Compulsory reconstitution of holdings at the instance of a certain fraction of landholders or in some cases without it.
- (iii) Subsequent indivisibility of reconstituted holdings.
- (iv) Exemption of the holding from seizure for debts.
- (v) Prevention of the reconstituted holding from being combined with other holdings.”

How far such legislative measures may be adopted in our country depends on the attitude of both the Government and the agriculturists of the country, towards the problem.

II. Irrigation. *Its necessity and Importance.* In an agricultural country like India where nearly eighty per cent. of the population are directly or indirectly dependent upon agriculture, the problem of water supply to cultivate lands is a very important problem for the country's well-being and prosperity. The necessity and importance of irrigation increases more and more when one finds that the Indian peasant cannot afford to depend mainly on rainfall for this purpose. The unreliable nature of our monsoons, and their well-known uncertainty, their liability to failure or serious deficiency in the hour of need are widely known facts. In this connection if we analyse the evils of our rainfall, we come to the conclusion that India requires some more suitable and dependable arrangement of irrigational facilities. The following are some of the characteristic features of the Indian monsoons :—

1. In places like Sind and Rajputana the rainfall is so scanty and deficient that without making provisions for artificial irrigation large areas in these parts of India would lie waste and barren for ever.

2. In some other places where the rainfall is not scanty, it is not properly distributed over the year, and hence unreliable. In such places, as the uplands of Deccan, cultivation can be done confidently only in time of exceptionally favourable rainfall or if there is some method of artificial irrigation.

3. In some places the duration of the monsoons is very short, while the crops require a more abundant and regular supply of water. This results in poor crops.

4. There are also some areas where rainfall is excessive. This leads to soil erosion, and loss of some of the most productive soils. This has been the case in some of the districts of the Nerbudda territories.

5. Some places require rainfall in winter for cultivation of winter crops, but there are no winter rains, and intensive cultivation is not possible without artificial methods of water supply.

Such a state of affairs has led people to believe that our agriculture is a gamble in rain, whereas Calvert opines that Indian monsoons possess the mercurial temper of an Eastern potentate. The principal need of our agriculture in this respect is therefore a prudent economy of water supplied by rains, wells or rivers. Comparing our soils with English soils Dr. Voelcker says :

“ Speaking broadly the normal state of English soil is wet, and that of most Indian soils dry ; and whereas in the former the object is generally to get rid of the superfluous water by means of drainage, the difficulty in India is, as a rule, to keep the moisture in the land.”

Irrigation—an old practice. These requirements not being recent but having existed from times immemorial in India, there have been some arrangements in this direction in our country in the form of wells or tanks. History relates of a well-organized system of artificial irrigation as far back as the reign of Chandra Gupta Maurya (332-298 B. C.). Now-a-days one finds more suitable and better facilities in this direction. Large irrigation works on modern scientific lines have been constructed since the advent of the British, in all parts of the country, and many old ones renewed and revived according to the natural resources and needs of the different provinces of the country.

Kinds of irrigation. At present in India we have generally three kinds of irrigation works :—

(i) Tanks or storage works, which are reservoirs formed by collecting water in large areas.

(ii) Wells constituting what are called the Lift works, requiring manual, mechanical or animal power to draw out water,

(iii) Canals or river works.

1. **Tanks.** Irrigation by means of tanks—natural and artificial, has been prevalent in India for centuries back, and most of the now existing tanks are merely the remains of the old works. This system is necessary for those parts of the country where other methods are impossible or impracticable. Tanks are of different sizes varying from great natural lakes to small village ponds. They are generally common in the crystalline tracts of Southern India, especially in Madras, where they are found in a most highly developed form. They are practically unknown in the Punjab and Sind.

2. **Wells.** Irrigation by wells is more or less a private method of irrigation, and does not constitute a public work as the tanks or the canals do. Its importance, is none the less significant, as it accounts for about 25 per cent. of the total irrigated area. Modern improvements and scientific discoveries like subartesian bores, power pumps and hand pumps have increased the utility of wells, and have extended their use. But the Royal Commission on Agriculture is of opinion "that irrigation from tube-wells is never cheap as compared with canal irrigation, and this aspect of a greater expenditure may stand in the way of extending the use of wells in India. The alluvial plains of Northern India are the most suitable for this purpose, and the Punjab and the U. P. are the chief well-irrigated parts besides Bombay and Madras.

3. **Canals.** Canals are gradually becoming a more important factor in the problem of irrigation in India.

Canals are of three different types found in different parts of the country according to local conditions :—

(a) *Inundation Canals*, which depend on the natural flood level of the river. Their utility is confined to that part of the year when the river is flooded and overflowing. The Punjab and the Sind lands are irrigated by such canals drawn from the Sutlej and the Indus.

(b) *Perennial Canals* are those which supply water throughout the year. They possess some form of a barrage

or dam across the river which deviates its water into the canal, irrespective of the conditions of the river. The great perennial system of the U. P. and the Punjab canals belong to this class. Besides these some of the inundation canals of Sind and the Punjab are being changed into perennial ones.

(c) *Storage Work*, wherein the rain-water of the monsoons is stored in some places walled by building dams, mainly across valleys. This water is then distributed by means of aqueducts to the desired places. This device has been practised in India from ancient times and at present it is to be met with in Deccan, C. P. and Bundhelkhand.

Extent of Irrigation. The following figures for 1933-34 indicate the extent and growth of total and net area irrigated in India, and the comparative position of the three methods of irrigation :—

Total Gross Area irrigated from all sources...55 million acres. (It was 46 in 1927-28.)

(Deducting the area irrigated at both harvests....51 million acres. (In 1927-28 it was 43,290,726, acres.)

Area irrigated by :—

(i) Canals	...	27	million	acres
(ii) Tanks	...	7	"	"
(iii) Wells	...	11	"	"
(iv) Other sources	...	6	"	"

The term "other sources" has never been clearly defined but they are supposed to "consist for the most part of temporary 'bunds' for the storage of rainfall, of lift irrigation from rivers and of channels from rivers and streams which are too small to be classed as canals."

Triennial Comparisons. The average area irrigated in the British India by Government works of all classes during the triennium 1930-33 was 30.23 million acres. The figures for various provinces were as follows :—

Provinces	Average area irrigated in triennium 1927-30	Average area irrigated in triennium 1930-33
Bengal ...	90,054	63,740
Bihar and Orissa ...	907,067	886,834
Bombay ...	406,748	382,729
Burma ...	1,904,321	2,076,435
Central Provinces ...	400,438	405,184
Baluchistan ...	22,407	21,430
N. W. F. Province ...	403,064	395,089
Madras ...	7,277,967	7,484,466
Punjab ...	11,200,550	10,995,258
Rajputana ...	31,984	25,098
Sind ...	3,579,592	3,690,000
United Provinces ...	3,639,867	3,805,205
Total ...	29,954,059	30,231,168

The following is the per centage of area irrigated by the Government irrigation works to total cropped area in several provinces during 1933-34 :—

Madras ...	19.4 %
Bengal ...	0.5 %
United Provinces ...	10.9 %
Punjab ...	35.1 %
Bihar and Orissa ...	2.9 %
C. P. excluding Berar ...	1.6 %

Of the total irrigated area 86% is under food crops with the following distribution :—

Rice ...	19 million acres	other cereals	6 million acres.
		and pulses.	
Wheat ...	10 "	Cotton	3 "
Jowar, Bajra,	} 7 "	Sugar cane	2 "
Barley and		Other food	
Maize		crops	5 "

Irrigation and the Government. In its early stages the British Government in India did not recognize the necessity and importance of the problem of artificial irrigation in the country. It had inherited from its predecessors some irrigation works in the form of inundation canals, storage works and tanks, but took no steps itself to improve or increase those works. This policy of neglecting an essential aspect of agriculture led to the ruin of most of those works. In the course of time it became conscious of its responsibility in the matter, and changed its policy of inaction to that of showing some activity, first in repairing and reviving the old works, and then undertaking the construction of some of the greatest works in the Punjab and U. P. which led to the formation

of new canal colonies especially in the Punjab. But all along these developments the progress maintained was very slow as the task was entrusted to private companies encouraged by the state. Further on, the pressure of circumstances forced the government to adopt a forward policy of undertaking itself the construction and upkeep of the different works by raising necessary loans. Simultaneously an Irrigation Commission was appointed to enquire into the relative requirements of irrigation works in different places. The recommendations of the Commission were in the direction of constructing Protective Irrigation works in those tracts of the country where famines were more likely to occur. The recommendation was made with the plea that these works would enable the Government to dispense with the huge expenditure it would be required to undergo in case of famine relief. It was to remedy the occurrence of famines and the failure of crops that the recommendation was made. Since that time considerable activity has been displayed by the Government.

Statistics. The acreage irrigated in India exceeds the combined total of that in the six countries which stand next to her in the list of the world's largest irrigation countries, including the United States. This acreage, traversed by some 79,000 miles of Government channel alone, has now reached the colossal figure of 40 millions and provides direct employment for no less than 50 million people, or a seventh of the country's population.

The total capital outlay up-to-date is in the neighbourhood of Rs. 150 crores. The value of the crops raised with the assistance of irrigation is in the neighbourhood of Rs. 100 crores annually. The gross revenue amounts to about Rs. 13 crores: the working expenses to Rs. 5 crores and net revenue to Rs. 8 crores. This gives a return of $5\frac{1}{2}$ p. c., which is a good return considering that a large proportion of the projects are "protection works" which do not yield profits.

Some Important Irrigation Projects of India. *The Sukkur Barrage* is the greatest irrigation work of its kind. The construction was started in 1923 and completed in 1932. A one mile long barrage has been made across the Indus. Seven canals have been taken from it which can irrigate nearly 5 million acres. The existing inundation canals will be assured a perennial supply of water. Besides this new areas would be brought under cultivation. The capital outlay on the scheme is Rs. 20 crores, on which a return of $10\frac{1}{2}$ per cent. was expected. These bright expectations cannot be realised now. The great fall in prices

has upset all calculations. All the same the new irrigation scheme is hoped to mark an epoch of economic prosperity for Sind.

Sarda Canals. The Sarda River Irrigation Works in the United Provinces were put into service in December, 1928. The project provides irrigation facilities to the north-western districts of Oudh and Rohilkhand. The system as a whole contains some 650 miles of main canal and branches. The area irrigated by the canal is 1·4 million acres. The estimated cost is £7 million.

The Cauvery Reservoir. The object is to secure a regular supply of water for the irrigation of Cauvery Delta and to extend irrigation to an area of 13,00,000 acres. The estimated cost of the scheme is £5·5 millions. The essence of the scheme is the construction of a large dam at Mettur, on the Cauvery. The Mettur Dam is the largest dam in existence in the world.

Facilities for Canal Irrigation in the Punjab. The average rainfall in the province is 28 inches per annum. In the south-west of the province it is as low as 9'1". The Punjab, therefore, is not the favoured province of the rains. But the province is well-suited for canal irrigation. The rivers of the Punjab take their origin in the snow-clad mountains of the Himalayas and so never run dry. All the rivers flow in the same direction and open like the fingers of an open hand over the province. The level plains make the excavation of canals easy.

The area irrigated by the canals in the province is ten million acres, which is the maximum for any single province in India. The capital outlay on the canals in the Punjab is Rs. 32 crores. The annual value of crops on the canal irrigated areas in the province is Rs. 50 crores (calculated at the price prevailing in 1928).

The Triple Canal System. The Triple Canal System is the greatest irrigation work of the province. It irrigates the area lying between the Ravi and the Sutlej rivers. The Montgomery district (lying between the Ravi and the Sutlej) could be irrigated from the Ravi. But the water of the Ravi had already been tapped by the Upper Doab Bari Canal to irrigate the districts of Lahore and Amritsar. The river therefore, had insufficient water to feed another canal. The surplus water of the Jhelum was carried through the Chenab and the Ravi to irrigate the desert district of Montgomery. For this purpose three canals were made. The Upper Jhelum Canal takes the spare water of the Jhelum at Mangla, and pours into the Chenab at Khanki. Thus the Lower Chenab

Canal is fed with Jhelum water which irrigates a part of the district of Gujrat. The water of the Chenab is thus freed to be used elsewhere. The Upper Chenab Canal taken off from the Chenab at Merala is constructed to link it with the Ravi. It irrigates the Sialkot, Gujranwala and Sheikhupura districts. It crosses the Ravi at Balloki and is then known as the Lower Bari Doab Canal. The Montgomery district is thus irrigated. The total area irrigated by the whole project is four million acres and has cost $10\frac{1}{2}$ crores of rupees.

The Sutlej Valley Works. The project is intended to irrigate 5 million acres of which 2 million acres are in the Punjab, 2·8 million in Bahawalpur and 0·35 million acres in Bikaner. The inundation canals which irrigate an area of $1\frac{1}{4}$ million acres will be converted into perennial canals. Some $3\frac{3}{4}$ million acres of desert will become cultivable. Four weirs have been constructed, 3 on the Sutlej* and one on the Punjnad. Twelve canals are taken off from the above weirs. The total cost of the project to the end of 1932-33 is Rs. 21·12 crores.

The construction of the Haveli project has been started in 1937.

The total cost of the project is estimated at Rs. 536 lakhs and the construction will be completed in four years. It will provide a perennial irrigation to a gross area of about 700,000 acres, and in addition a non-perennial irrigation to about 860,000 acres. Large areas in the districts of Multan, Muzaffargarh and Jhang will be converted into flourishing colonies.

The Thal project is being examined. When executed it will bring the blessing of water to the Mianwali and Muzaffargarh districts.

Canal Colonies of the Punjab. Before closing the discussion of irrigation in India a passing reference may be made to the development of the canal Colonies in the Punjab. This has been regarded as a phenomenon of unique importance in the history of irrigation in India. Only a generation ago the areas around some of the rivers of the province were lying waste with a population of a few thousands mostly nomadic. By the construction of canals, facilities were provided there for artificial irrigation: colony villages were systematically planned and colonists were brought from the specially congested districts of the province, thus turning vast stretches of barren land

* Four natural groups of the Sutlej Valley works are on the Ferozpur, Suleimanke, Islam and Punjnad Head works.

into flourishing villages with smiling fields around. The Chenab Canal Colony and the Jhelum Canal Colony are the more important of these colonies. In the words of M. L. Darling, "the colonies have, in fact, opened for the Punjab an era of prosperity undreamed-of in the past."

This meant a great relief of pressure on land in old districts, improvements in production and general amenities of rural life, growth of new towns and markets and the increase in Government revenues. The canal colonies are among the most progressive and productive areas of the province.

Water-logging and Salt-Effervescence. In connection with the method of canal irrigation in India we must mention the evils of water-logging and salt-effervescence. Both these dangers were not guarded against in the past with the result that in some areas instead of conferring a benefit, canal irrigation led to soil deterioration.

Water-logging means rising of the sub-soil water leading to its accumulation on the surface of the soil, and salt-effervescence consists in the appearance of salts driven to the upper surface of the soil. Water-logging may render land totally uncultivable while effervescence of salt renders it unfertile, unless proper measures are undertaken to check their occurrence. In providing for canal irrigation therefore along with the services of an engineer, services of a soil-physicist, an agricultural chemist, a medical and a sanitary expert are also required which will make all possible provisions for guarding the soil against the fear of water-logging and its attendant dangers. Moreover the cultivator must pay sufficient attention to proper drainage in fields and he should guard against over-irrigation. Lining of the canal beds with cement will also prevent water-logging.

New Developments in Irrigation. Irrigation engineers and local governments are taking up the question of developing electricity at irrigation works and of irrigating by means of tube-wells. In connection with the former much has already been done in Madras on the Cauvery Mettur System, while a comprehensive grid system is in operation in the United Provinces and another is in process of completion in the Punjab. Many of the schemes completed in recent years contain provision for the generation of hydro-electric power.

Tube-well irrigation has also been initiated in some provinces. It has found particular favour in the United Provinces which contain the largest tracts of fertile land in the country.

The setting up of a central research station under the Central Board of Irrigation is under contemplation. This research station will deal with such matters as the meandering of rivers, seepage and water logging.

III. **Manures.** "Water and manure together represent in brief the ryots' main wants."

In spite of the fact that so much of India's economic activity is centred round agricultural production, "the question of proper manurial treatment of the soil, and of the careful conservation of manure is much neglected in the country".

The problem is a serious one and requires a constant devotion on the part of the agriculturists as well as the state. If we study the economic history of different countries, we find that wherever and whenever agriculture has been the main occupation of the population of a country some interest and concern was shown in the problems of making the soil maintain its fertility. The generally prevalent methods were as follows:—

- (i) Fallowing,
- (ii) Rotation of crops.
- (iii) Raising of mixed crops.

The most common method was to keep groups of land fallow for alternate seasons, so that they might get recouped during the time. The method could be easily adopted as long as all cultivable lands were not required to be cultivated simultaneously. With the growing necessity of increasing the area under cultivation the other two methods gained a relatively greater importance. But the increasing pressure on the soil in India with the recent fall in world prices of agricultural commodities calling urgently for more efficient methods of agricultural production made it apparent that the problem of soil-nourishment by the application of manures and fertilizers was a vital factor in increasing the yield from the soil.

After making a comprehensive study of the problem as it confronts our country the following observations may be made:—

1. The wasteful practice of using cow-dung as fuel should be discouraged and a simultaneous provision should be made for alternative forms of cheaper fuel. One chief recommendation regarding this is the careful preservation of village forests, which would serve a triple purpose—it would release dung for being used as manure by supplying fuel for domestic use, would supply grazing ground for

cattle, and would preserve agricultural land from being denuded of its silt by erosion. It is the duty of the Forest Department of the Government of India and the local bodies to take steps to this effect.

2. The chief defect of the Indian soil is their low content of organic matter. This can be easily removed by the use of cattle urine, and human excreta as manures. The prejudice of most of the Indian agriculturists against this method is steadily dying out. Mr. Brayne's efforts in the Punjab villages in the direction of utilizing fully human excreta and all garbage for this purpose by digging pits in villages to be used as latrines and refuse-bins has achieved much success. The importance of this step lies in the established truth that every kind of organic refuse should eventually find its way back to the land as manure.

3. The use made of fertilizers and mineral manures is generally increasing in India. The Imperial Council of Agricultural Research has made a study of this problem, and has issued its recommendations. The Agricultural Department is also active, and India is showing a steady increase in the use of ammonium sulphate, bonemeal, fish-manures, and oil cakes.

4. The problem of 'Green-manuring' also requires adequate attention. In some parts of Southern India it has been found that cultivators cultivate different trees, the leaves and tender twigs of which supply manuring food to the soil.

5. The value of rotation of leguminous crops (grams, beans etc.) is also worth consideration. Suitable methods to be employed in this connection should be fully investigated and applied.

IV. Other Miscellaneous Improvements. Another cause of the backwardness of Indian agriculture is the complete absence of certain permanent improvements on the land, which have been so widely applied in the case of western farming. It has been remarked about Indian fields that they "lie unwatered, unfenced and unembanked, without shelter for man or beast". This makes us feel that an average Indian cultivator is handicapped by the following factors :—

- (i) Lack of fencing.
- (ii) Absence of field embankments.
- (iii) Insufficient system of drainage.
- (iv) Absence of farm buildings.

(i) Fencing is one of the very essential demands to improve the condition of farms and its absence is responsible for many disadvantages, as for example : crops lie at the mercy of wild boars, stray cattle, and trespassers; boundary disputes crop up; and more labour is required in connection with herding cattle and watching crops. Absence of fencing enforces a uniform cultivation. All farmers in a village sow the same crops.

(ii) The absence of field embankments results in soil erosion and scouring of the land. Field embankments and fencing arrangements should be provided for by joint schemes through the help of the Government as it lies beyond the power of the individual cultivator to supply for himself these requirements.

(iii) The soil is not properly levelled and there is no satisfactory arrangement for drainage. This gives rise to the evil of water-logging and damaging other people's land if water is made to run beyond one's fields. This can be removed by a proper control of surface drainage.

(iv) Absence of farm buildings makes supervision difficult and expensive with an enormous waste of time and labour of both men and cattle. Although it will bring great benefit yet there are some difficulties, mentioned below in the way of making this improvement — to make the cultivator stay on his own holding :—

1. The cultivators lose the mutual protection and security which they require and which they get by living on the village site.

2. The conservative habits—attachment to the ancestral village dwelling.

3. Expenses to be incurred in the change.

4. A cultivator's holding is not one compact block but is scattered over different places.

5. The requirements of a well on the farm building for drinking purposes would be a further expense and trouble.

1. **Labour.** Under this head we are to make a general survey of about 70% of our population *i.e.*, about 111,164,586 persons, who constitute the factor of labour in Indian Agriculture.

There are many kinds of agricultural labourers in the country *i. e.*, land-owning farmers, permanent or semi-permanent tenants, and landless workers. The last class forms the most easily available class and hails from the lowest ranks of unskilled workmen. Women also do the agricultural work and other occupations associated with it. The

supreme importance of this factor of production in our agricultural economy cannot be disputed. The importance of the man behind the plough can hardly be exaggerated. It has been observed, "In the end it is the character of the cultivator that counts," and "The wealth of nations lies, not in the material resources at its command, but in the energy, initiative and moral fibres of its people; without these attributes no country can become permanently prosperous; with them, no unfavourable circumstance can long prove an insuperable obstacle."

About his general characteristics opinions vary. An average agricultural labourer is as much condemned by some as praised by others. There are always two sides of the picture and so our agriculturists and peasants have their merits as well demerits. There may not be any objection if some authorities point out the serious defects and drawbacks in the personal character of our agriculturist. We may also come to this conclusion, if we study that aspect of his life and habits. Thereby it is generally regarded, and of course rightly regarded, that the Indian peasant is ignorant and consequently his method of cultivation is unscientific. He is unenterprising and unambitious, constitutionally negligent, prone to idleness and slackness, and cannot be trusted to work hard, to take care of his tools and materials, and to display the best standard of workmanship. Hence, in spite of their seeming abundance, they prove to be insufficient and inefficient. All this is due to the fact that he is lacking in originality and initiative, is a slave of traditional methods and practices and is easily influenced by superstitions and prejudices, which play a considerable part in his activities. He falls an easy prey to inertia, apathy and conservatism. He has insanitary methods of living and suffers from improvidence, and recklessness. He seems to be very fond of wasting his energies and substance in needless and endless litigation and locks up his capital in the form of ornaments and jewellery instead of utilising it to increase his efficiency. His spendthrift nature displayed on occasions of marriages and social ceremonies make him walk "with eyes open into the moneylender's parlour from which he is rarely able to get out".

Such a bad picture painted of him should not lead us to think that an average peasant of our country is nothing else but one deserving denunciation. Of course, the defects enunciated above are real evils in his case, but it should not at all make us believe that the labour material in India is hopelessly disappointing. In face of the evils counted above he has his merits also, which equally deserve a mention.

Dr. Voelcker held. "The idea generally entertained in England and often given expression to even in India, that Indian agriculture is, on the whole, primitive and backward, are altogether erroneous.... the conviction has forced itself upon me that, taking everything, and more especially considering the conditions under which Indian crops are grown, they are wonderfully good. At his best the Indian cultivator is quite as good and in his worst it can only be said that this state is brought about largely by absence of facilities for improvement which is probably unequalled in any other country, and that the peasant will struggle on patiently and uncomplainingly in the face of difficulties in a way that no one else would."

And he goes on to say. "To take the ordinary acts of husbandry nowhere would one find better instances of keeping land scrupulously free of weeds, of ingenuity in devising water-raising appliances, of knowledge of soils and their capabilities, as well as of the exact time to sow and reap, as one would in Indian agriculture, and this not at its best alone, but at its ordinary level. It is wonderful too, how much is known of rotation, the system of mixed crops, and of fallowing. Certain it is that I at least, have never seen a more perfect picture of careful cultivation, combined with hard labour, perseverance and fertility of resource, than I have seen at many of the halting places in my tour."

Such a description is not at all in contradiction to what we have already observed above. The two different opinions may not make us get confused about what Indian agricultural labour really is. As, on the one hand, it cannot be denied what Dr. Voelcker held about the problem, so on the other hand we do find that because of some reasons or causes, which are largely not in his control, our average labour is inefficient. His efficiency "must be acknowledged to be inferior in point of intelligence, enterprise and capacity for labour to the European or American farmer. His inefficiency, however, is not innate or rooted in the nature of things and is, therefore, capable of being remedied. He is bowed down with the heavy and weary weight of many burdens and handicaps and the wonder is that he still continues to carry on the struggle for existence and is not altogether extinct."*

So instead of regarding it as a mass of antithetical observations, we come to the conclusion that so far as his own personality is concerned, he has his merits as well as demerits. Whereas his merits consist in his personal capabilities, his defects "must be looked for in the heart-breaking con-

* Jathar and Beri, Vol. I. --

ditions under which he works. This view is borne out by the fact that the Indian peasant is comparatively alert, tenacious and enterprising in those tracts where the rains are dependable or where irrigational facilities are available and he can confidently expect to reap the reward of his labour. Where, however, conditions in this respect are unfavourable, he is apt to be lazy, pessimistic, easy-going and miserably poor."¹

Coming to the vital importance of seeking remedies for removing the actual shortcomings and defects of the cultivator we find that it requires a double action on the part of the agriculturists themselves as well as on the part of the state; first, through education in the widest sense of the term, secondly, through an improvement of external conditions. It has been aptly remarked, "Improve at once both worker and environment, so that each may help the other."²

Rural Education. *Improvement of Worker.* Ignorance and illiteracy of Indian labour constitute the chief factor responsible for almost all the evils of the countryside. Illiteracy is the one evil of many evils. It "aggravates indebtedness, promotes improvidence and extravagance, impedes the progress of improved agriculture and, what is more serious than anything else, prevents that mass awakening without which no reform can be permanent."³ Mass education, and their consequent enlightenment to their duties, privileges and responsibilities is, therefore, one of the most urgently needed reforms in this connection. The question is what sort of education does our cultivator stand in need of? The answer is simple and plain. The system and curriculum of education should be primarily based on the requirements of the agriculturists and should have a direct relation with his mode of life.⁴ The first step should be the spreading of a general compulsory education, which will make him feel conscious of his proper place in the economic life of the country. This should be followed by such a course of study as to inculcate the dignity of labour in him making him feel

1. 2. 3. Jathar and Beri. Vol. I.

4. *Education a doubtful Boon.* "But education, as it is has proved of poor benefit to the agricultural classes. An inquiry lately made in villages to find out the extent of employment, underemployment and unemployment amongst matriculate village youths has revealed an almost unanimous desire to find employment in occupations other than agriculture and preferably in towns; the man who fails to find a job is looked down upon as a failure in life, and not only does this stigma attach to him, he is often unfit to earn his livelihood by working on the land."—C. & M. Gazette, 28th May, 'The Rural Riddle', article contributed by L. R. Dawar, M.A.

his own responsibility for his present backwardness. The education as a whole will provide him with a true notion of values, and will create in him that mental attitude which will in the long run prove beneficial to him. It will make clear to him the injurious effect of his superstitions and prejudices, and the disutility of the wasteful and unscientific practices, which form a part of his life at present. To put it briefly, it shall be a panacea for all the ills of the countryside. Children's education, adult education, and female education, all should proceed simultaneously for this purpose. Besides this, night-schools, continuation classes, libraries, reading rooms, magic-lantern shows, cinema shows, exhibition trains etc. etc. will also be helpful in arriving at the desired destination.

The whole machinery should be of such a type as to make each and every member of the family to take a keen and active interest in thus improving his or her personality. They should be taught to act on the maxims of self-education and self-reliance with the above facilities provided for them rather than being forcibly made to do so.

There may be one difficulty in this respect for the persons engaged in the task. The difficulty is of a general feeling of disinterestedness and disinclination on the part of rural population for such a purpose as education. To overcome this fundamental obstacle, continuous and intensive propaganda on peaceful and alluring lines through state agencies as well as public bodies is necessary. Persons chosen for this difficult task should be consequently persons of fact, energy and imagination with a complete knowledge of winning the sympathy of the villagers.

IMPROVEMENT OF EXTERNAL CONDITIONS

(Environments)

1. **Physical Efficiency.** The prevalence of a fatalistic attitude of mind combined with the social observations and practices generally tells heavily upon a peasant's physical efficiency. Moreover these factors also stand in the way of checking the spread of diseases and epidemics whenever they occur in rural areas. Spread of diseases has a fourfold disadvantage : (i) It reduces the labour-power of a country. (ii) It shortens the supply of workers. (iii) It decreases the capacity of workers in times of agricultural operations. (iv) It renders people lazy, listless, and fatalistic.

The remedy lies in 'a comprehensive programme of propaganda to impress upon the villagers the importance

of public health and hygiene. They should be made to live a life of activity and of sanitary habits. Campaigns of cleaning villages, making provisions for decent dwellings and necessary medical facilities are equally necessary.

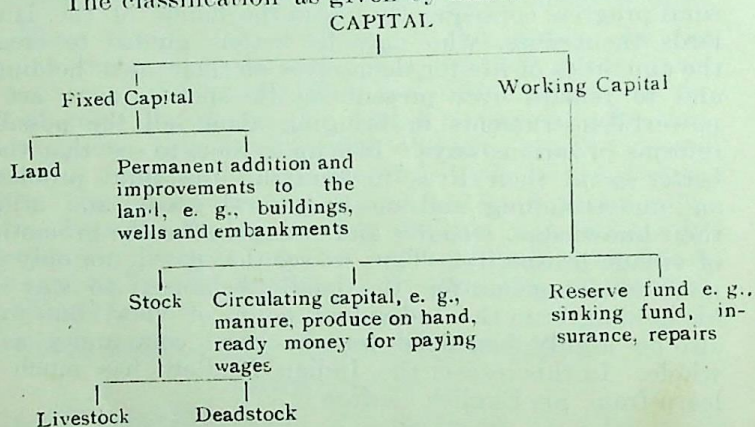
2. **Landlordism.** Another step to be taken to improve the environment of agricultural labour is to reform, what has been termed, "absentee landlordism". An economist has said, "Next to war, pestilence and famine the worst thing that can happen to a rural community is absentee-landlordism." It is the 'lure of the city' acting as a powerful force in this direction. The amenities of urban life and the forms of comforts and luxuries associated with it lure away the landlords from their agricultural holdings in rural areas, with very few exceptions. So instead of taking any active and real interest in the welfare—material, intellectual as well as cultural—of the rural working class, their function is confined to the narrower limit of selfishness in receiving punctually their rents from lands. The responsibility of removing this obstacle in the way of rural progress consequently lies in the hands of the landlords themselves, who may be better guided to create the amenities of life for themselves on their own holdings, and to remain ever present on the spot so as to act as powerful instruments in bringing about all the possible reforms in various ways. It is up to them to see that they better spend their lives in studying the rural problems and understanding and meeting rural needs, and utilise their knowledge, resource and enterprise for the promotion of village prosperity. Thus we see that it will not only be more advantageous for the landlord himself to stay on his holding from the individual point of view, but may also be highly beneficial for the rural community as a whole. In this respect the Indian landlord has much to learn from his English confrere.

3. **Technique of Cultivation** As regards the technique or methods of cultivation followed in the country, the general opinion is that "they can occasionally be seen to reach a very high standard in India, but in many parts of the country there is considerable scope for improvement in respect of preliminary preparation of the soil, sowing, harrowing, weeding, thinning and spacing out, harvesting etc." In order to create a better state of affairs we should provide facilities for spreading mass education among the cultivators in these technical matters. They should be taught the importance of adopting intensive cultivation by improving their methods to every possible extent.

Other factors in this connection are : (i) the necessity of having better and pure seeds, and (ii) the system of rotation of crops. It is generally held that Indian farmers are not very careful in their selection of seeds. The necessity of utilising seeds of higher quality should be carefully impressed upon them. The system of rotation of crops is also not being followed on proper lines. The lure of immediate gain has led many agriculturists to concentrate on certain highly-paying commercial crops like cotton and jute. There should be a propaganda to make the cultivator realize the urgency of a better system of rotation based on scientific lines rather than on monetary motives, which in the long run prove injurious.

Capital. About the kind and form of capital in the case of agricultural production Keating has given us a comprehensive idea of the varied equipment (falling under the factor Capital) which an average cultivator, stands in need of.

The classification as given by him is as follows :—



The problem arising in case of land, and its permanent improvements (*i.e.*, fixed capital) have already been discussed above. About the supply of working capital, an analysis of the present position shows that on an average our farmers possess a very small and simple equipment, which is more or less traditional in this country. His deadstock consists of "old and simple implements, which are cheap light and profitable". His livestock is, almost the whole of it, composed of cattle, which go overworked and ill-fed. The problem of any sort of reserve fund is becoming more and more a distant dream for our farmers. Instead of making themselves financially independent, they are day by day, being deeply immersed into indebtedness, and agricul-

tural occupation in recent times, has become so expensive as to have gone out of the power of agriculturists to bear it. It was once remarked by Professor Brij Narain: "Agriculture has ceased to be remunerative. The fact is that if the wages of a chaprasi were guaranteed to our peasant-proprietors and tenant-cultivators they would migrate to the towns in a body." There may be very few exceptions to this but what we have given is in broad terms the existing state of affairs.

Considering then the immediate necessity of improving the lot of our agriculturists, we find that it is ultimately a question of jingling pockets. It is clear that greater productivity, and better agricultural operation with better results depend on the kind of equipment a farmer has but wherefrom all that equipment is to come? The peasant is a man of very meagre means.

The conclusion is thus enforced upon us that a full discussion of the adequacy of the supply of capital depends upon the financial position, and the amount of money-reserve which an ordinary Indian cultivator may possess.

We will have first to determine his monetary strength before suggesting what improvements he has to make to have a complete control over this factor of production, as it always requires a substantial expenditure mainly on the part of the cultivator to equip himself with all the necessary requisites, mentioned above. A remark made long ago appears to be more true now than it might have been then: "The native cultivators have nothing to learn so far as unscientific agriculture is concerned, and the adoption of scientific agriculture is wholly beyond their means."

Live Stock. The part played by cattle in agriculture is very great. "Without them the fields remain unploughed, store and bin stand empty, and food and drink lose half their savour, for in a vegetarian country what can be worse than to have no milk, butter nor ghee?"*

According to the Live Stock Census of 1935 there were in British India, excluding Bengal, Bihar and Orissa, 113 million heads of bovine cattle, made up roughly of about 84 million oxen and 29 million buffaloes. The total figure for this census is five per cent. more than that of 1930 census.

There is a serious shortage of *efficient cattle* in India. Attempts to compensate quality by quantity increases the

* M. L. Darling.

difficulties of the reformer. A large supply of diminutive cattle is a serious drain on the existing fodder. Moreover with a large stock the problem of improving the breed becomes a very difficult one.

Improving the Breed. The work is carried on along two lines. The quality of the milch cattle is being improved by cross-breeding. The centres of the Imperial Dairy Farms are at Bangalore, Wellington and Karnal. The Provincial Departments have their own dairy farms. In the Punjab one is maintained at Lyallpur and the other at Hissar.

The breed of the draught cattle is also being improved. The bulls of Hissar are of a very superior quality and are greatly in demand.

Fodder. The Agricultural Departments have paid a great attention to the problem of fodder growing and storing. As green fodder cannot be obtained throughout the year, it is the dry stored fodder on which the cattle feed. Many experiments have shown that maize, jwar, cut and stored in Kutcha pits make good silage. New types of fodder crops are also being grown. Egyptian clover is becoming very popular.

The Veterinary Department. The Veterinary Department is entrusted with the health of the cattle. It tries to prevent cattle epidemics. Castration of bulls is also one of the activities of this Department. This is just to prevent inferior bulls from spreading their species.

Dairying. It is a pity that such an important indigenous industry as dairying has not attracted sufficient attention. The annual cash value of dairy products has been estimated at over 800 crores of rupees and the importance of milk and dairy products to the health development of the people cannot be overestimated. It should be possible to start trade in a number of other milk products such as tinned butter, milk-powder, condensed milk, tinned cream, casein etc. Extensive industrial research connected with the handling and processing of milk and dairy products under Indian conditions is necessary for the development of dairying as a village industry.

Organization.—After having studied the three factors of production in relation to agricultural production in India, it is now possible to suggest methods of a better organization of our agriculture. Organization in production is not a separately existing factor by itself, and it only implies how the different forces in relation to the other three factors at our command are to be co-ordinated.

so as to give the best results. The following suggestions, some of which have been already noticed, may conjointly form the factor of organization :—

1. **Land.** (i) Redistribution of land after determining the proper size of an ordinary economic holding.

(ii) Protection of village forests.

(iii) Better methods of canal irrigation, economy of water and a proper drainage system.

(iv) A proper use of manures.

(v) Introduction of dry farming in area of water scarcity.

(vi) Arrangements of protection against animals, insects and pest damaging the crops.

2. **Labour.** (i) Spread of education.

(ii) Removing absentee-landlordism.

3. **Capital.** (i) Improvements in the financial position of the agriculturists.

(ii) Use of modern machinery.

(iii) Improving the efficiency of cattle.

In spite of its imperative necessity we have to deplore the fact that our agriculture suffers from a lack of proper organization, which is largely responsible for the backwardness of Indian agriculture. Because of the lack of modern form of organization, it is held that "Indian agriculture is primitive and backward". The opinion thus expressed may not be challenged, as it is clear from a historical survey of the agricultural economy in India that Indian agriculture has progressed very little and has undergone no substantial changes in the modes of its organization during the last few centuries. Though it is the primary industry of India yet very little has been done to, what is called, "modernize" our agriculture. Its main and fundamental features are to a large extent the same, as they were centuries ago. And there may not have been as much of progress or improvement in this connection as there has been a marked decline and deterioration of its characteristics. We have already expressed our opinion in the beginning of the chapter that its present position is far from satisfactory and that it is mainly due to the fact that nothing tangible is being done to improve the ancient, primitive and traditional practices of our agriculturists in the light of the remarkable and even revolutionary changes that have taken place in other agricultural countries of the world like Australia and Canada. It is the duty of

all parties concerned—the state, the landlords, the agriculturists and the public leaders—to take some immediate steps to remove this primary deficiency. Broad lines along which these steps are to be taken have already been dealt with at their proper places.

Marketing. The average Indian farmer works on so small a scale that it is impossible for him to take his produce to the markets. The result is that he has to sell his produce to the local dealer at rates which are very often lower than the rates current in the bigger markets, and thus he does not benefit much by the rise of prices. This is especially the case in Bengal, Behar, Orissa and the United Provinces. Here most of the articles of export are purchased from local dealers by the exporting agencies. There are too many brokers and touts in the larger markets and also too many intermediaries between the person who actually brings the crop into the market and the final consumer in India, or the exporter. The market rules and organization do not usually provide means for preventing or punishing fraudulent trade methods and the multiplicity of local weights and measures causes much confusion. There is also the grip of the mahajan or the money-lender who takes advantage of his position to offer a low price for the produce. Thus we see that the farmer does not get a fair price of his produce. The Royal Commission on Agriculture analysed his difficulties as follows :—

1. Heavy indebtedness.
2. Low standard of literacy.
3. Unsatisfactory communications.
4. Absence of properly regulated markets.
5. Lack of combination among producers.

Consequently the following steps should be taken to facilitate the task of the cultivators :—

1. The Establishment of Regulated Markets.
2. The dissemination of information about markets.
3. Marketing of produce to foreign markets should also be regulated.
4. A standardisation of weights and measures.
5. Organisation for financing agriculturists.
6. Improvement of communication and transportation.
7. Replacement of middlemen.

Large scale marketing requires a proper grading and sampling of the products. Indian exports do not fetch their full price as they are supposed to be not of a uniform

quality. The quality of the various grades must be kept uniform from year to year. When marketing takes place under proper rules and by-laws administered by a marketing committee on which the growers are also represented, the farmer is protected from unauthorized deductions, false weighing and low quotations.

The provision of suitable ware-housing facilities would enable the farmers to store their goods. On the security of the ware-house certificates the farmers should be able to get loans from Co-operative banks. This arrangement will enable the farmer to sell his produce when he can get a favourable price for it.

The New marketing organization. The marketing organization of the Government of India consists of the Agricultural Marketing Adviser, senior marketing officers and assistant marketing officers. The provinces also now have their departments of marketing. The main activities of the marketing department are : (i) Investigation *i.e.*, marketing surveys of important products, which provides details about the methods of existing marketing arrangements, (ii) Developmental work, which consists in keeping the producers in touch with the consumer and the popularisation of standard grades and packing, (iii) Work on grade standards relating to the physical and chemical characteristics of products.

AGRICULTURE AND GOVERNMENT

History. In India agriculture has been a time-old occupation. We may go as far back as possible, and still we find that country's government—Indian or foreign—has ever stood in a direct relation with the tillers of the soil. But we are to make a short historical survey of the connection between the state and agricultural occupation beginning from the establishment of the British power in India under the Crown (1858), till the agricultural policy of the present-day government.

It was in 1866 when for the first time it was proposed by the Famine Commission to have a special Department of Agriculture. The proposal having been regarded as premature, was dropped. In 1869 at the instance of the Manchester Cotton Supply Association, the question was again taken up, and the Association urged through the Secretary of State that a separate Department of Agriculture should be established in each province. A beginning was made in 1871 with the establishment of a central department to deal with the problems of Revenue, Agriculture and Commerce of the Government of India.

but this scheme lasted till 1879 only. The Famine Commission of 1880 again made recommendations to the same effect, which led to the ultimate establishment of provincial departments of Agriculture, besides the Central Departments, mainly for the purpose of agricultural enquiry, agricultural improvement and famine relief. But this even could not lead to any satisfactory results, and the persistent demands of the Government of India at last convinced the Secretary of State for India who in 1889 "sent out Dr. J. A. Voelckar, Consulting Chemist to Royal Agricultural Society, to advise upon the best course to be adopted in order to apply the teachings of agricultural chemistry to Indian agriculture and to affect improvements in it. This was an important advance and may indeed be regarded as the first serious endeavour to frame a policy of agricultural research suited to the condition of India." The book, he wrote after his researches, "Improvement of Indian Agriculture"—was the first report on the problems of agriculture in India.

The Famine Commission of 1901, and the Irrigation Commission of 1903 further suggested the importance and necessity of agricultural enquiry and improvement. Simultaneously Mr. Henry Phipps, an American visitor, and Sir David Sassoon gave a generous donation of £ 30,000 in 1903 to the Government of India for scientific research in agriculture. This greatly improved the financial condition of the Departments, and an Imperial Research Institute was founded at Pusa (Bihar) with complete paraphernalia which was supposed to become "a focus of agricultural activity for all India". Lord Curzon's government (1899-1905), however, found that unless sufficient impetus was given to the development of these problems in the provinces, the Central Department or the Institute (Pusa) would be of little value. A scheme was consequently set up, and resulted in the starting of agricultural colleges at the different provincial centres like Lyallpur, Cawnpur, Poona, Patna, and Coimbatore.

Further important changes were brought in by the Government of India Act 1919. Agriculture became a transferred provincial subject. The Imperial Department of Agriculture (Central Government) lost almost all powers of superintendence, direction and control over the administration and was left to be concerned only with the agricultural problems of all-India importance. Finally came the Royal Commission on Agriculture in India in 1926, which was the first Commission appointed by the British Government "to examine and report on the present conditions

of agricultural and rural economy in British India, and to make recommendations for the improvement of agriculture and to promote the welfare and prosperity of the rural population". The Commission after two years' inquiry prepared and finally published its report in 1928, making recommendations to the Government of India on a variety of questions dealing with the agricultural occupations in India.

The Government after holding an agricultural conference at Simla, consisting of provincial representatives, decided its line of action and finally issued a statement detailing the action taken on the recommendations of the Royal Agricultural Commission.

The Imperial Council of Agricultural Research. Among these recommendations the most important was the one relating to the constitution of the Imperial Council of Agricultural Research. This recommendation was given effect to in May, 1929, when the Imperial Council of Agricultural Research was started. The constitution of the Council, however, differs a little from that recommended by the Royal Commission as it was found expedient to set up a separate Advisory Board to deal with scientific and technical matters and a Governing Body (mainly composed of Ministers of Agriculture and representatives of the Central Legislature) to deal with questions of policy and finance.

Its functions. The establishment of the Council marked the acceptance by the Government of India of the most important recommendations of the Royal Commission in the field of research. "I think it is generally agreed that the experience of the last seven years has demonstrated the suitability of the scheme for the purpose for which it was devised. Those purposes in the words of the Commission report, are to promote, guide and co-ordinate agricultural research throughout India and to link it with agricultural research in other parts of the British Empire and in foreign countries. In advancing this recommendation my colleagues and I were moved by the hope that the setting up of the Imperial Council would strengthen and extend the spirit of co-operation and mutual help between the centre and the provinces. In the great work of agricultural improvement our investigations had impressed us with the very important part which central organisations play in the field of agricultural research and of rural development in countries such as the United States of America, Canada and Australia. We were convinced that we could render no greater service

to the cause of agricultural progress in India than by seeking to discover means to counter the growing decline in co-ordination between centre and provinces and between province and province which had become increasingly evident to all observers in this country and which had its origin in the constitutional changes that had taken place." remarked our present Viceroy, Lord Linlithgow, (who was the Chairman of the above mentioned Royal Commission on Agriculture in India, 1928) during the course of an address to the Advisory Board of Imperial Council in Simla in July, 1936.

The Imperial Council of Agricultural Research on its constitution was given an initial research grant of Rs. 25 lakhs, and an annual research grant of Rs. 7.25 lakhs.

Convinced of the utility of a central organization such as the Imperial Council of Agricultural Research, which brings them into touch with the activities of the Agricultural and Veterinary Departments in British India, several of the Indian states too are associating themselves with the activities of the Council. The States of Hyderabad, Mysore, Baroda, Kashmir, Travancore, Bhopal and Cochin, for instance, have secured membership of the Council and have made suitable donations to its funds.

In addition to the task of disseminating scientific and technical information on matters agricultural, the Council has arranged for higher training and research in certain special branches of agricultural science, namely, dairy technology, virus diseases of plants, soil micro-biology, physiology of fruit trees, and insect pests, one worker being appointed to each branch. The Council has also made a grant to the Calcutta University for special post-graduate training in statistics.

The expansion of the Pusa Institute as an educational centre was another important recommendation of the Royal Commission. The establishment of the Imperial Council of Agricultural Research has brought Pusa into closer touch with the provincial departments of Agriculture and the latter with each other, and the transfer of the Pusa Institute to New Delhi is a further improvement. The Government of India accepted the recommendations of the Commission to make the Pusa Institute (now at New Delhi) a centre of post-graduate training and necessary facilities for research work, in addition to post-graduate training, are now being provided at the institute with funds provided by the Government of India.

Research Sub-stations. Sub-stations of the Institute have also been established throughout India, and in addi-

tion to the sub-stations (botanical and sugarcane) at Karnal, Muktesar, Bangalore, Wellington, Anand, and Coimbatore. Sugarcane experimental stations, financed by grants from the Imperial Council of Agricultural Research are now in operation in Dacca (Bengal), Mushari (Muzzaffarpur-Bihar), Shahjahanpur and Muzzaffarnagar (United Provinces), Julundur and Lyallpur (Punjab), Padegoan (Bombay-Deccan), Anakapalle and Gudiyattam (Madras), Jorhat (Assam) and Mysore. Sugarcane research stations of the same type are also to be opened shortly in the Frontier Provinces and Baroda out of grants made by the Imperial Council. These stations enable the productions of the Imperial Sugarcane Breeding Station at Coimbatore (itself a branch of the Imperial Institute of Agricultural Research) to be thoroughly tested throughout India and the actual selections made under local conditions.

In one of its recommendations the Royal Commission suggested the constitution of a Central Jute Committee. This recommendation, too, has been accepted by the Government and a Committee has recently been constituted, with the Vice-Chairman of the Imperial Council of Agricultural Research as ex-officio President. The Committee will be financed for the time being by grants from central revenues.

Apart from proposals made for the organization of agricultural research, there were certain recommendations made by the Royal Commission, specially for agricultural improvement which could be implemented at the centre. These relate to the conservation of fertilizers and investigation of certain problems of cultivation.

Specific Problems undertaken by the Imperial Council of Research. So far as fertilizers are concerned, the Imperial Council of Agricultural Research appointed two committees, namely, (i) a Fertilizer Committee for the investigation of problems relating to the conservation of indigenous manurial resources, and (ii) an Oil-crushing Industry Committee to deal with the question of developing the oil-seed industry.

The Imperial Council has also assisted in the collection of data regarding the bone-crushing industry, in the design of a small power-drawn bone-crusher and in experiments on the solubilization of bones by simple methods.

At present the following Standing Committees of the Council are at work : the Sugar Committee, the Fertilizer Committee, the Locust Committee, the Oil-crushing industry Committee, the Animal nutrition Committee, the Dairying

Committee, the Cattle breeding Committee, the Joint Committee of the Imperial Council and the Indian Central Cotton Committee.

The Commission also stressed the necessity of railway-freight concessions on fertilizers and agricultural machinery. As a result, the rates for both State-managed and Company-managed railways were reduced.

Another measure taken to implement the recommendations of the Royal Commission is the establishment of a Central Bureau of Information for Irrigation in 1931, to perform the functions contemplated for it by the Royal Commission.

It may also be pointed out that a sum of more than a crore and a half rupees has up till now been granted by the Government of India to the Imperial Council.

The provincial departments of agriculture carry on experiment and research on agricultural farms and laboratories, and organize propaganda to secure the adoption of new methods and improved implements.

Improved varieties of Crops. They have also been doing valuable work in the production of improved varieties of crops, and progress has been accelerated recently through the assistance given by the Imperial Council of Agricultural Research. Agriculture being a Provincial subject, the Council's responsibility extends only to the encouragement and co-ordination of the work of the Provincial Agricultural Department and dissemination of scientific information. Its activities are limited mainly to research, but an important feature of its constitution is that it has no research institute of its own. The work is carried out by the Provincial research institutes, the Imperial Institute of Agricultural Research and its branches, and through the Universities to which grants are made to carry out schemes of all-India importance. The great advantage of this method has been that it ensures an impartial position for the Council and facilitates the co-ordination and supplementation of Provincial activities.

Improvement effected in crops generally lies in superior quality, or in greater yielding capacity, or in disease resistance and better adaptability to environments. The variety eventually selected usually combines several of these advantages, but it is not introduced into general cultivation, unless it gives a yield 15 per cent. greater than the ordinary seed. In a vast agricultural country like India, naturally a good many crops have come under investigation.

It was estimated a year ago that the area under improved varieties of crops in British India was over 16,000,000 acres, representing an increase of over 20 per cent. in the course of the last two years. The corresponding areas in the states rose by 12 per cent. last year. These figures give an approximate idea of the extent to which improved varieties of crops have evolved in India including cotton, wheat, rice, jute, sugarcane, tobacco.

Fruit Industry. A remarkable expansion in recent years in the fruit industry has led to numerous requests for assistance from the Council, and a group of fruit research schemes have been started. In Bombay extensive experiments are carried out on storage and transport, and it has been shown that tropical fruits, particularly mangoes, can find a profitable market in Europe, if transported by modern methods. Each province has its own research programme according to its special needs, and particular attention is being devoted to the diseases and pests of fruit trees.

Agricultural education and research. Something may also be said here about the educational machinery and courses of study provided by the state in relation to agriculture. This machinery consists of two distinct types of agricultural education: (i) the first type consists of higher studies of these problems meant for those persons who have already acquired some general education in English and have got some diplomas or certificates from Universities. (ii) The second type consists of those primary and middle schools, generally in rural areas where agriculture is taught as a special subject besides other general subjects which form the curricula of studies in urban areas.

1. There are at present six provincial centres*, besides the Central Institute at New Delhi formerly at Pusa, established in different provinces which besides being centres of scientific research also give a training in modern agricultural methods for those actually engaged or intending to be engaged in farming. Whereas the training at New Delhi is more or less confined to post-graduate students, the colleges in the provinces have full degree courses, as well as short courses for a less period leading up to an ordinary diploma or certificate.

2. Coming to the problem of practical instructions in agriculture in the primary and middle schools in villages, we find that in the Punjab, the United Provinces and Bombay a number of "Agricultural bias" institutions have been set up with proper staff and provision for practical

*Poona, Coimbatore, Nagpur, Cawnpore, Lyallpur and Mandlay.

operations. In the Punjab, teaching of practical agriculture in vernacular middle schools is introduced in such a way as not to debar students taking agriculture from proceeding to a higher stage of general education if they desire to do so, whereas in Bombay agricultural middle schools are merely technical and craft schools, providing a course in agriculture of a practical character with the specific aim that the pupils after getting their training may go back to the land.

The three links. "As now constituted, the agricultural departments include a complete organization for bringing the results of the application of science to agriculture in the village. At one end of the scale are the agricultural colleges and research institutes—at the other thousands of village demonstration plots where the effect of improved seed, methods, implements and manures is shown under the cultivator's own conditions. Intermediate links in the chain are the experimental farms, where scientific research is translated into field practice, demonstration and seed farms and seed stores*.

Conclusion. After examining the working of the machinery of the state with regard to agriculture in India, and considering the present pitiable plight of the tillers of the soil, we come to the conclusion that research work, dissemination of scientific and practical knowledge, meetings of agricultural committees and Imperial Councils or the achievements of agricultural institutions can only show the way to improvement.

All these seemingly huge efforts are, what may be called, "tinkering with a vast problem". For a true solution of the problems of poverty, hunger and unemployment what is urgently needed is a fundamental re-organisation of Indian agriculture with drastic changes in the existing order of things concerning the system of land-holding, methods of cultivation and the principles of agricultural taxation, the solution of agricultural indebtedness and industrialization of our country at present excessively depending on agriculture.

SUMMARY

Introductory. The most striking feature of the Indian economic life is that agriculture still persists to be its mainstay. In one way or the other all problems of its economic prosperity depend upon the success of agricultural economy. In spite of all this we find that in all its aspects agricultural activity in India suffers from a number of evils. Unless we take a lesson from other agricultural countries of the

*Indian Year Book, 1937-38.

world in this respect, it is difficult to say anything about the future of Indian economic life. Even in the matter of country's industrialisation we have to see that proper improvements to modernize Indian agriculture are not ignored.

Land. The different statistics in connection with the factor of land prove that instead of making any efforts to extend the area of cultivation, it will be more fruitful to develop irrigational facilities combined with the factor of intensive cultivation. The yield per acre is very low. The natural as well as human forces leading to this sorry state of affairs are numerous and varied. Connected with it is the controversial problem of progressive deterioration of soil in India. Whether there be any definite proofs to this effect, it is most essential to pay a complete attention towards increasing the productivity of Indian soils. The more important problems to be discussed in connection with this factor of production are :—

1. Fragmentation and Sub-division of Holdings,
2. Irrigation,
3. Manures,
4. Other miscellaneous Improvements.

Fragmentation and subdivision of holdings constitute a very serious draw-back of Indian agriculture. The two phenomena are closely inter-related and connote the idea that the holding of any single agriculturist consists of different strips of land situated in scattered places. The detailed figures to this effect show that the problem is sufficiently acute, becoming more and more serious daily. General causes leading to it are : increase in population with little industrial development, peculiar laws of inheritance and the growth of individualistic spirit. Some people advance some arguments in its favour, but a more practical study proves that this phenomenon is more uneconomic than advantageous in the long run. 'The cultivation of an unusually small holding entails waste in a variety of ways'. Beside the disadvantages that are common to small holdings, there are some defects that are peculiar to the phenomenon of fragmentation. The problem of eradicating this evil is not so easy as it may seem to be. For this the measures adopted in other agricultural countries can guide us to a more practical path. The co-operative departments all over the country, after a lot of persuasion and propaganda, have achieved some progress in the matter of fragmentation. Legislative measures can be adopted after much consideration only. As regards subdivision it is suggested that the promulgation of the law of primogeniture should bring the desired object nearer, but the measure might result in the dispossession of a large number of people and the consequent growth of unemployment.

The problem of artificial irrigation is very important for India as the general features of its rainfall are not very satis-

factory and dependable. It is remarked that our agriculture is a gamble in rains. The dry nature of the soil combined with the above deficiency has existed from times immemorial and there have been arrangements for artificial irrigation in the past also. At present we have three types of works : tanks, wells and canals. The Punjab, Sind and the U. P. are known for their canal irrigated areas and Madras for well-irrigation. Canals are further subdivided into three types found in different parts according to local conditions. The figures show that the area irrigated by canals is the widest, wells occupying the second place, followed by tanks and 'other sources'. As regards geographical distribution the Punjab has the widest area irrigated. Provincial governments have full-fledged departments of agriculture for the necessary administrative duties. Associated with the method of canal irrigation are two harmful phenomena known as water-logging and salt-effervescence, which render pieces of land either totally unfertile or less and less productive. Proper attention paid to drainage schemes and the services of technical experts can diminish the magnitude of this danger. Another phenomenon—very blissful—resulting from the provision of canals has been the development of large irrigated productive areas in the Punjab called the canal colonies. Before this provision they were uninhabited and unfertile tracts of land. The advent of canals brought there number of immigrants and "opened, for the Punjab, an era of prosperity, undreamed-of in the past".

Manures represent the Indian ryot's second main want for the nourishment of the soil. The problem is again not simple. In other countries where agriculture has been people's occupation, three methods have been generally in practice for the proper manurial treatment of the soil, namely, fallowing, rotation of crops, rising of mixed crops. Indian conditions show that in this respect we can take such measures as the use of cowdung, cattleurine, human excreta and other available organic matter as manures, use of fertilizers, system of green-manuring, and rotation of crops.

In addition to all the suggestions and observations made above under different heads, we have to add further that the factor of land stands in an urgent need of the following miscellaneous improvements : proper fencing of the fields, provision for field embankments and farm buildings, and the development of drainage system.

Labour. A proper study of the man behind the plough in India is indispensable in view of the fact that it is not so much the natural resources of a country as the character of its labour that governs the prosperity of its agricultural population. About Indian agricultural labour two different opinions have been recorded by different people—opinions which may look to be contradictory at first sight but really they represent the two aspects of one and

the same problem. One opinion represents an average labourer as ignorant, unenterprising, unambitious, idle, negligent, conservative in methods and engaged in a number of wasteful practices. The other picture shows him as wonderfully good, industrious, persevering and resourceful, scrupulous in weeding out fields, ingenious in water-lifting appliances and possessing enough knowledge about soil, rotation of crops, fallowing and such other matters.

Instead of regarding this discussion as a mass of antithetical observations we should conclude that our agricultural labour has its merits as well as demerits. The real problem is that of seeking adequate remedies for the removal of its shortcomings and defects. It requires as much action on the part of the agriculturist himself as that on the side of the state. Necessary measures to this effect are : putting into practice thorough and well-planned schemes of rural education, improvement of the labourer's physical efficiency and the technique of cultivation, and the reform of the practice of absentee-landlordism. In this connection it should be noticed that the foremost factor should be the proper education of the cultivator which will enlighten him on the methods of solution of his real problems. As soon as this is achieved the idea of self-help and self-assertion will dawn upon his mind goading him on to take up the necessary cause of action to improve his lot.

Capital. The term agricultural capital is so vast and comprehensive as to include in it the factor of land, live and deadstock of the cultivator as well as his circulating capital and reserve fund. We have discussed some of these problems already. But the more real problem to be solved is that of the peasant's financial position, which has recently reached almost its lowest ebb. The problem is so vital and urgent that unless our peasants are brought on to a more sound financial level, all discussion about agricultural improvement in our country is mere talk. Our cattle are poor in quality. There is a large supply of inefficient cattle in the country. Improving the breed of the cattle and fodder facilities are very essential.

Organisation. The problem of organisation is not much in itself but is a proper and unified adjustment of all the problems connected with the other three factors of production. The remark 'Indian agriculture is primitive and backward' applies to the lack of any ideas about this adjustment or organisation amongst our agriculturists. It is the duty of all persons and parties, concerned or connected with agricultural prosperity, to take all the necessary steps in reforming this sorry state of affairs.

Marketing. In connection with the question of marketing it is generally felt that the peasants have still to work under various handicaps and obstacles to get their labours fully repaid. In order to remove the difficulties that come in his way in respect

of his bringing his produce to the markets directly and getting a full payment we will have to remove some of his other shortcomings also, and will have to provide him with the necessary facilities in the matter.

Agriculture and Government. The relations between the Government and the agriculturists of India present a long continuous story of a body of facts and figures as well as schemes and measures adopted by the government at different times as a result of the needs and forces of time. Out of these the most noteworthy are the report of Dr. Voelckar who was sent out to India in 1889 in this connection, appointments of various Agricultural, Irrigation and Famine Commissions, establishment of an Imperial Research Institute at Pusa—now transferred to New Delhi, as a result of the donations received by the government from two American donors. The Royal Commission on Agriculture of 1926 and the consequent agricultural conference at Simla discussed almost all the problems concerned with the improvement of Agriculture in India. Since these discussions various measures have been adopted by the government giving effect to some of the schemes proposed.

QUESTIONS ON CHAPTER VI

1. Discuss the importance of agricultural economy in India. Is its present condition satisfactory?
2. What are the causes of the low agricultural yield in India? What measures would you adopt to bring about an improvement?
3. After examining the statistics pertaining to agricultural land in India what suggestions do you give about the development of extensive and intensive cultivation?
4. What conclusion do you draw from the discussion on the problem of progressive deterioration of soils in India?
5. "The problem of Indian agricultural development is mainly a problem of water supply". Discuss the various ways by which attempts have been made to solve this problem. (C. U. 1926)
6. Why is irrigation more necessary in India than in any other country of the world?
7. The prosperity of agricultural countries depends upon its rainfall. Is it true of India?
8. Describe the different methods of irrigation followed in India, and form an estimate of their comparative efficiency in contributing to wealth-production. (P. U. 1930)
9. Discuss the direct and indirect advantages of irrigation in India, and state the conditions imposing a limit upon its utility. (P. U. 1928)
10. What do you know of the various stages in the development of the irrigation policy of the Government?
11. Give a brief account of the Punjab Canal Colonies and consider their place in the economic life of the province. (P. U. 1918)
12. Discuss the causes and the economic consequences of the undue sub-division of agricultural holdings in many parts of India. What suggestions would you offer for remedying this sub-division of land and for enlarging the size of the holdings? (P. U. 1919)

13. Show how Indian agriculture is handicapped by the fragmentation of holdings. Discuss the causes and the remedies of such fragmentation. (P. U. 1929)
14. What is the present position of the factor of land in Agricultural Production in India. Does it need improvements? If so, on what lines?
15. "The Indian cultivator is a living emblem of inertia". Discuss the statement.
16. What type of education is required to improve the outlook of our peasants?
17. What steps should be taken to improve the position of agricultural labourers in India?
18. What do you know of the practice of Absentee-Landlordism in India?
19. What capital does the Indian agriculturist require for the successful prosecution of the industry?
20. "The agricultural methods of the Indian cultivator are unscientific but not inefficient". Explain the above statement and examine the drawbacks of Indian agriculture as regards the provision of agricultural capital and the methods of marketing agricultural produce. (P. U. 1921)
21. What part does the factor of organization play in agriculture in India?
22. Discuss the importance of agricultural research in India. Write short notes on the Royal Commission on Agriculture, 1928 and Imperial Council of Agricultural Research.
23. Give a review of the efforts made by the Government to improve agriculture in India.
24. Along what lines is the work of the agricultural departments carried on and what measure of success has been achieved?
25. Write an essay on Agricultural Education in India.
26. Are the steps taken by the Government of India in relation to Agricultural improvement adequate? How far do they solve the real problems of Indian agriculturists?
27. Show clearly what position the average Indian cultivator occupies in the agricultural industry in relation to the supply of the factors of production and organization. (P. U. 1930)
28. Examine the influence on Indian life, economic and social, of the fact that the main occupation of the country is agriculture. (P. U. 1927)

CHAPTER VII

FAMINES

In connection with Indian Agriculture we are to study another problem, which has been as ancient in the country as agriculture itself. It is the problem of Indian Famines. If we make a chronological survey of the occurrence of famines, we come to the conclusion that famines have been frequently recurring calamities in India. The reason is not far to seek. India is primarily an agricultural country and it has often been asserted in the previous chapters that about 80% of her population depend upon agriculture as the sole basis of living. India's prosperity is intimately connected with good harvests. And if the harvests fail totally or partially at some places, the result is obvious—the occurrence of the famines.

History of Famines. From a fuller study of the problem we find that :

During the Hindu period of her history (from the beginning up to 1192 A.D.) India did not enjoy absolute immunity from famines. But judging from the infrequency of allusions to these calamities in the ancient books, it would not be unsafe to assert that famines occurred rarely in ancient India.

From the histories of the Mohammedan period (1193—1756) we get records of several famines, four of which were very severe.

During the rule of the East India Company (1757-1857) "India suffered in one part or another, from twelve famines and four severe scarcities".

Since the transfer of the administration of India from the Company to the Crown (from 1857 upto the present day) there have been ten important famines besides a large number of severe scarcities.

Food and Money Famines. But famines of the ancient and mediæval days—Hindu and Mohammedan periods—differed fundamentally from the famines of the British period in their nature and characteristics. Whereas formerly, when villages formed self-sufficient units, aloof from one another and separated from the outside world for lack of sufficient means of transport and communication, famines were local famines and food famines. They were

the result of the insufficiency or failure of crops because of : first, the insufficiency or failure of rains ; secondly, destruction of crops by insects and pests ; thirdly, loss of crops by hailstorm, frosts, floods or wars. There was a negligible communication between places, suffering from lack of food and the consequent disasters and hardships, and the places—even sometimes adjoining—where people had as usual sufficient to eat and to spare. People depended on the “good will of nature and suffered when it was not generous”.

Man's progressive harnessing of the various forces of nature leading to the development of means of communication and transport changed the very basic nature of famines. In contrast to the food famines of the ancient and middle ages which were defined as sufferings from hunger on the part of the large classes of population, we have only money famines now. Rains may fail in one part of the country, and not all over the country simultaneously. The crop failure at one place may be balanced by an exceptionally good harvest at other places and so there may be no dearth of food-grains available, considering the country as a whole. The people of the affected area may only suffer for lack of money to buy food. It is thus not only food that the state has to distribute to the famine-stricken, but to provide them with work and wages on an adequate scale to enable them to live by themselves. Thus “at present a famine is more accurately described as a temporary dislocation of employment due to the failure of crops than as wide-spread death from starvation”.

Famines, to-day, may be likened to trade cycles which are characterised by alternate periods of trade activity and depression. The recent agricultural depression was due to fall of prices owing to the overproduction of agricultural products. “On the one hand it is a problem how to feed the growing population and on the other the low price of food-grains is attributed to over-production ; in no recorded famine of India had distress extended over so long a period of time as during the present agricultural depression.”

Causes of Famines. Amongst the causes leading to famines we may speak of the following :—

1. Natural or physical,
2. Agricultural,
3. Financial or monetary.

1. **Natural Causes.** We have already enumerated these causes which are also sometimes called direct or immediate causes, consisting of :—

- (i) Failure or insufficiency of rains,
- (ii) Floods, storms, or wars.
- (iii) Insects and pests.

2. **Agricultural causes.** Amongst the causes that are directly connected with the operations of agriculture, we have:—

(i) Dependence of a vast majority of people on one single industry *viz.*, agriculture,

(ii) Existence of uneconomic holdings which causes poverty among the people, who live from hand to mouth and have no reserves or resources to fall back upon in times of distress,

(iii) Absence of organized credit facilities and the inability of the people to obtain money in times of need,

(iv) Pressure of population on the land is great and there are few industries to draw off the surplus population and afford to the people alternative means of earning a livelihood,

(v) Scarcity of agricultural capital,

(iv) Agricultural labourers are uneducated, untrained and ignorant.

3. **Monetary Cause.** The monetary cause is always at the root of all famines in India and may be considered from two aspects.

(i) *General poverty* and the consequent resourcelessness of the people. Famines are only the manifestation of a country's comparative poverty. The average income of the people is too small to leave any surplus behind after their necessary expenses have been met. Again there are some pernicious social customs which compel them to spend a large amount of money on ceremonial occasions and often we find the poor Indian agriculturist incurring heavy loans at high rates of interest. "In good years, he has nothing to hope for except a bare subsistence; in bad years,.....he falls on public charity. The class of landless labourers are the worst sufferers in famines. The majority of Indians have no reserve power and hence they suffer so terribly whenever there is a famine."

(ii) *Excessive land assessment.* Some authorities contend that the system of land revenue as prevalent in India is another cause of famines. The temporary settled districts of India have to pay a large percentage of the fruits of their labour to the Government as revenue and what is left after is scarcely sufficient for the maintenance of the poor peasants. The Government has tried in vain to adduce evidences to show the unsoundness of this criticism.

Heralds of Famine. The unmistakable signs, or danger-signals, of a famine, when it becomes imminent, are the following :—

(i) There is a failure of rains followed by a failure of crops.

(ii) Prices rise high, and the less efficient among the labourers, finding no employment, swell the ranks of beggars.

(iii) There is a contraction of credit and of private charity.

(iv) Theft and robbery increases and a general restlessness is visible among the people.

(v) There is also a deterioration in the health of the people which often leads to epidemics of a serious kind.

Famines and their Economic Effects. Economic effects of famines are inevitably disastrous in a preponderantly agricultural country like India.

(i) The heavy mortality due to starvation has ceased to be a usual feature in modern famines, though epidemics, following in the wake of famines account for very high mortality.

(ii) The general efficiency of the surviving people is lowered and the suspension of cultivation results in a great financial loss to the cultivator.

(iii) Scarcity of food-grains is also accompanied by scarcity of fodder crops with the resultant loss of cattle.

(iv) There is also an adverse reaction on trade and industry as the purchasing power of the large masses is greatly reduced.

(v) Public finance is disorganized and the Government has to sustain a loss on the side of revenue, which decreases inevitably, and of expenditure, which expands at the same time.

Now we proceed to discuss the relief-measures and the further suggested remedies, that are applied or should be applied both by the agriculturists and the state to check the occurrence of famines, in the first instance, and if they occur, to relieve the resultant hardship and misery.

State Aid. (a) *Evolution of the Famine Policy.* Famines being a national calamity no state or government of any country at any time could keep itself aloof from such occurrences. It had to provide for all sorts of facilities and measures of relief in such cases.

In the pre-British days, history makes mention of the adequate relief-measures undertaken by the state both in the Hindu as well as the Mohammedan period. In the

later days emperors like Mohammad Tughlak, Akbar, and Shahjahan, always organised relief-measures on a large scale, trying their best to alleviate the suffering and hardship of the people. Public-works were started; direct charity was given; provisions were distributed; the collection of rents and taxes was suspended etc., etc. But defective communication hampered greatly the task of the state in those days.

Coming to the British period we find that in the regime of the East India Company famine did not receive any appreciable attention either at the hands of the government or the historians. The state of political turmoil, chaos and confusion, combined with the early commercial considerations of the Company, was responsible for the indifferent attitude of the government towards famines. It has been rightly remarked that the East India Company, "seemed to be concerned with the dividends of its shareholders than with the lives of those from whom these dividends were drawn. The Company in the later years of its existence acknowledged in a general way its obligations to the famine-stricken people; but it failed to evolve any systematic famine policy. Slipshod and spasmodic efforts were made to deal with famines by regulating prices and trade in corn, encouraging emigration and occasionally undertaking public-works. But all this was mere tinkering with a vast problem."

After the transference of the power from the Company to the Crown we find that there was a progressive perfection of the administrative organization dealing with famines which was the result of different experiments made, measures adopted, and relief given, along with the simultaneous recommendations made by the several Famine Commissions appointed by the government whenever there were cases of famines or scarcities in any part of the country or all over it.

The gradual evolution of the measures led to the formulation of the present famine policy of the government embodied to a great extent in the Provincial Famine Codes, different for different provinces, which differ in minor details only while agreeing in all essential matters.

(b) *Famines Relief measures.* These codes prescribed, first, the precautionary or preparatory arrangements to be maintained permanently; secondly, the steps to be taken when the information of the impending scarcity or the famine is received. They also lay down the duties of all officers concerned when famines or scarcity does actually occur, and the various measures of relief to be organized. These arrangements, steps and measures are classified into three stages as follows:—

The first stage consists of :—

(a) Liberal advances to be given for various village improvements *e. g.*, the construction of temporary and the repair of permanent wells.

(b) Liberal advances to be given for the purchase of seed for the next crop.

(c) Inquiries as to the suspension of revenue to be commenced.

(d) Test-works to be started and poor houses opened at the main centres of population.

(e) Relief-circles to be organized after a necessary inspection of different suitable places.

(f) Non-official co-operation to be enlisted and public charity vigorously organized.

(g) Preliminary lists to be drawn up of persons eligible for gratuitous relief.

(h) The police to be supplied with funds to relieve the wanderers and the distressed.

(i) If there are threatenings of a scarcity of fodder or drinking water steps should be taken to meet it and to encourage private enterprise to improve fodder and to develop the water-supply.

The second stage. This stage is concerned with the organization of test-works, gratuitous relief, and poor houses already referred to above and other minor measures. The object of test-work is "not to relieve famine, but to test the presence of it: not to relieve hunger, but to find out whether people are hungry." Directly the number attending test-works indicate that further relief measures are necessary, test works should be converted into relief works, which are the backbone of famine relief administration. Relief-works should be of two kinds, public works and village works; the former working under the Public Works Department, and the latter under the revenue authorities.

The distribution of gratuitous relief should also begin when test-works are converted into relief-works; and care should be taken to see that all persons entitled by the Code to receive it are brought up on the list. Poor houses also should at the same time be started at all convenient centres for the reception of persons unfit to work. Of the minor measures of relief, the most important is that of kitchens, intended mainly for the dependents of persons engaged on the relief-works. The other minor measures are: (a) gratuitous relief to 'pardanashin' women, (b) relief to respect-

able men, (c) relief to artisans, (d) relief to weavers, and (e) temporary orphanages.

Last Stage. Before the rains break, and in time for the prudent use of money, large 'takavi' advances should be given for cattle and seed, and Charitable Fund donations should be distributed. At the beginning of the monsoons people may be induced to leave the relief works, provided the necessary pressure is used with the greatest caution and safeguarded by a large extension of gratuitous relief. After the necessity for State relief has completely ceased with the growth of new crops, all relief operations should be closed.

(c) *Famine Insurance Grant.* It was in 1876, that the Famine Insurance Grant was instituted according to which Rs. 1½ crores were annually set apart for the purpose, to be expended as follows :—

- (i) On famine relief.
- (ii) On protective works.
- (iii) On avoidance of debts.

Under the Government of India Act 1919 every province was asked to contribute a fixed sum every year for expenditure on famines. If this sum was not spent on famine-relief, it went to build up the Famine Relief Fund primarily available for the same purpose. Besides this government provision, there is a Trust Fund created out of the donation of Rs. 15 lakhs by the Maharaja of Jaipur and amalgamated with the United Provinces Famine Orphans' Fund. This fund stood at Rs. 32,59,600 in 1934. The fund has been permanently invested and the income from it is available for expenditure for relief-works when necessary.

Prevention of Famine. The consideration of these facts should not, however, lead us to imagine that the rules thus laid down and the method and procedure of organizing famine-relief are thoroughly adequate and leave nothing to be desired. All such palliatives may alleviate the apparent suffering superficially whenever it occurs, but this touches only the fringe of the real problem, i.e. the ever present problem of poverty of the masses. There is no gainsaying the truth that the great poverty of the people—the agriculturists—is the ultimate and the root cause of famines at the present day. Unless and until measures are adopted and reforms introduced in the economic life of the country in order to remove this basic cause no remedies or measures may be expected to be of permanent or everlasting character.

Of the many features of Indian poverty in this connection we may point out "the excessive reliance of the population on agriculture—an industry dependent on an uncertain rainfall—the decay of old industries and the absence of new ones, and a peasantry steeped in indebtedness, living from hand to mouth, without any reserve to fall back upon in times of scarcity. The remedies for increasing economic strength and staying power of the masses include a great variety of measures more easily suggested than carried out." Following are some of the suggestions :—

(i) *Further extension of irrigational facilities.* This will remedy, to a great extent, the failure or insufficiency of rainfall and shall provide the cultivators with a more reliable and dependable source of water.

(ii) *Further construction of roads and railways.* This step is necessary to facilitate the task of supplying relief-measures in case of failure of crops in certain area or areas.

(iii) *Preservation of Forests.* This will prevent the occurrence of floods and other harmful atmospheric phenomena.

(iv) *Modernization of Agriculture.* It is most urgently needed to increase the qualitative and quantitative production, resulting in the creation of a desire for a higher and better standard of life amongst the peasants.

(v) *Industrial Development.* The development of large scale industries will relieve the pressure of population on the soil, while an encouragement given to cottage industries will provide means of extra employment in times of slack agricultural season or even in cases of unemployment amongst agricultural labourers.

(vi) *Raising the credit of the cultivator,* on convenient lines through state agency. This is primarily essential in order to save the peasants from the clutches of the greedy moneylenders of the villages and to bring them to a financially more sound and comfortable position.

(vii) *Reorganisation of Land Revenue Assessment.* Recent investigations in this direction have shown that high rates of revenue assessment drove the farmer to sell all his gold reserves and to draw further loans from the moneylenders in order to fill the coffers of the state. An immediate revision of the existing principles of assesment on more scientific and moderate lines is consequently the greatest need of the Indian cultivators to improve their economic position.

(viii) *Reduction of Public Expenditure.* The main reasons for the existence of heavy revenue and water-rates is the costly, or what has been better termed, top-heavy administration of the country. A reduction of public expenditure is another important step to be taken in this connection.

SUMMARY

Famines. Occurrence of famines has been as old as agriculture itself in India. Failure of crops at any time resulted in a slight or a high scarcity of food in the country. A fuller study of the problem shows that with the passage of time India suffered from more and more periods of draught and failures of crops, though recently steps have been taken to counteract them. The famines of the past ages and those of the modern times are distinguished from one another as food-famines and money-famines. When India consisted of self-sufficient village units, cut off from one another, famines meant, "sufferings from hunger", while in more recent periods when modes of transport and communication were developed and food could be sent from one place to another, a famine became more of "a temporary dislocation of employment due to the failure of crops than as widespread death from starvation".

The causes leading to the phenomenon are numerous ; natural, concerned with the vagaries of rains, floods, wars, insects and pests ; agricultural, connected with the defects of rural economic life ; monetary, such as general poverty and resourcelessness and excessive amount of land-assessment. Whenever a famine occurs anywhere, it has its accompanying signs and consequent effects hitting hard the agriculturists of the affected area.

In the Hindu and Muslim periods of our history adequate measures were adopted whenever famines occurred. The attitude of the East India Company, during its rule, is described as, "mere tinkering with a vast problem". Since the assumption of power by the Crown schemes and plans were designed to this effect and Provincial Famine Codes were drawn up for the guidance of the district officers in times of famine. The codes cover completely all the stages of measures of relief for the stricken areas. A Famine Insurance Grant has also been instituted to provide for their help.

Considering all these facts and figures we may suggest that some further steps should be taken note of, *e. g.*, extension of irrigational facilities, rail and road construction, preservation of forests, modernization of agriculture, industrial development, re-organization of the land revenue assessment, reduction of top-heavy administrative expenditure etc., etc.

QUESTIONS ON CHAPTER VII

1. Discuss critically the question whether famines in India are famines of food or famines of money. (C. U. 1917, and P. U. 1928)
2. "The history of famines in India is largely the story of how the meaning of that word has been modified through the forces of economic transition and the perfection of administrative organisation." Explain.
3. Estimate the economic causes of Indian famines. (C. U. 1909)
4. Give an account of the principles and programme of famine relief in India. What is meant by saying that Indian famines are now famines of money, not of food. (P. U. 1928)
5. Examine the principles which guide the administration of famine relief in India and describe the measures which constitute a modern plan of campaign against famines.
 "The only radical cure for famine will be found in the encouragement of diversity of occupations among the people." Explain. (P. U. 1919)
6. Explain carefully the general and special measures adopted by the government to meet the famine problems in India. Indicate in the briefest manner how the government famine policy has developed in the course of last forty years. (P. U. 1917)
7. Enumerate the various measures which are taken in relieving the affected population (a) in early stages of a famine (b) in the midst of a famine (c) after a famine is over. (C. U. 1915)
8. "Modern India famine relief is one of the most remarkable achievements in the history of scientific administration." How far these measures have succeeded in their aims? (C. U. 1923)
9. Can you suggest any improvement upon the existing method of famine-relief? (C. U. 1919)
10. Write notes on (a) Famine Codes, (b) Famine Signals.
11. "The cultivator's power of resistance to famine has increased in recent years." Discuss this remark. (P. U. 1929)

CHAPTER VIII

RURAL RECONSTRUCTION

I. Introductory. The Indian peasant is regarded as the backbone of the Indian Empire, though strangely enough, only a few steps were taken by the Government to better his lot. The recent heavy fall in agricultural prices has proved a blessing in disguise for the peasant. "The economic depression," to quote from the Despatch No. 392-D dated the 8th February, 1934 of the Punjab Government, "has emphasised two facts. First, that no effort should be spared to counter its effects by developing the resources of the province; and, second, that in the present state of the public and private financial stress, this development must depend, to a far greater extent than formerly, on the co-ordination of existing agencies, rather than on the creation of new ones." It was thus the depression and its consequent distress among the agriculturists that turned the attention of the Government as well as the public towards the necessity of devising means for rural reconstruction. Mahatma Gandhi inaugurated the movement by founding his Village Industries Association in 1934. The Government of India, perhaps taking inspiration from him made a provision of 113 lakhs in the budget for 1935-36 for rural reconstruction.

II. The Indian Peasant. The character and the mental outlook of the personal factor in Indian agriculture is more than anything responsible for its present-day defects and shortcomings and other manifold evils of the country side. Any scheme of rural development or reconstruction, if it does not aim at a complete metamorphosis of the outlook of the man behind the plough, will not strike at the root of the evil. We have already analysed this factor of our agricultural economy. Being left at the mercy of the monsoons and deprived, since long, of the reward of their labour by the avaricious tax-collectors, predatory invaders and robber chiefs, pessimism and fatalism have taken a firm hold of the minds of our peasants. They are if their outlook on life is changed, not inferior to their brother farmers in the West in matters of intelligence, enterprise and capacity for labour. They are indolent, slothful, easy-going and poor, because they are far from realising that the poverty is the wages of idleness rather than the curse of Providence or Fate. Lacking in initiative and originality and being extremely conservative they regard every change for the better a serious innovation and stick to their old, wasteful and unscientific

methods of cultivation. Superstitious, ignorant and illiterate as they are, they waste their scanty resources on unnecessary litigation, incur unproductive expenditure and prefer to lock their capital in ornaments and jewellery rather than spend it more productively by equipping themselves with better implements. They are blind slaves of tradition and spend far beyond their means on marriages and other ceremonies and fall an easy prey to the greed of the moneylender. Their villages are more fertile grounds for diseases and epidemics, which, taking the toll of thousands of them, leave the rest weak and incapable of hard-work.

III. Their Ills. The task before those engaged in the work of rural reconstruction is a formidable one as our country is in a state of 'arrested economic development' and Herculean efforts are required to bring it abreast of the times. "Things move slowly in the East," as the poet said, but in India they seem to have stood still to make one see "the same old wheel, the same old cart".

Agriculture is still and will continue to be the chief rural occupation; hence a large number of problems that are to be tackled in connection with rural reconstruction are those that are somehow or other related to agriculture, *viz.*, seeds, lives-stock; manure, methods of cultivation; tools and implements; irrigation works; transportation, communication and marketing, subdivision, and fragmentation of holdings; land tenure and land revenue systems; finance and revival of cottage industries. Education, indebtedness, sanitation and health form a separate group of important problems. By far the most important problem is that of revolutionary change in the outlook and habits of our peasants, for, as Mr. F. L. Brayne, Commissioner Rural Reconstruction, Punjab dreads "there are few who would dare to say that should prices rise to-morrow many people would not at once revert to their old thriftless habits."

IV. The Remedies. The misfortunes of the peasantry have not failed to win the sympathy of the public and the government and a large number of official and non-official agencies are busy in the work of improving the environments of the farmers, providing them with extra means of livelihood and with recreation during leisure hours. In many provinces in India there are separate departments of rural reconstruction for devising remedies for the ills enumerated above according to local needs. A sum of Rs. 95 lakhs was placed at the disposal of Local Governments, by the Government of India for rural reconstruction during 1935-36. An extra sum of Rs. 103 lakhs was provided for

the financial year (1936-37) which was distributed among the provinces as follows :—

	Rural population in Millions	Allotment in lakhs of Rs. 1935-36.	1936-37.
Madras ...	37.90	14	15
Bombay ...	13.79	7	5
Sind ...	3.19	...	3
Bengal ...	46.43	16	18
United Provinces ...	42.98	15	17
Punjab ...	20.51	8.5	8.5
Burma ...	13.15	5	5
Behar ...	30.91	...	12
&			
Orissa ...	7.80	12.5	4
Central Provinces ...	13.64	5	6
Assam ...	8.41	5	5
N. W. F. P. ...	2.04	3	3
Delhi ...	...	5	5
Ajmer Marwar ...	...	5	5
Coorg ...	...	5	5
Total		95.2	103

The Government of India made the following suggestions in connection with the above grant affecting the future of rural reconstruction in a letter dated August 5, 1936 sent to all provincial Governments. The Government hoped that the scheme of rural reconstruction would be re-examined and, so far as possible modified in the light of these suggestions.

The suggestions were :—

(i) "Each local Government should select two or three main objects suited to the conditions of its own province, to which to devote the money available, and should resist every attempt to deflect it from these objects. Two points which are eminently deserving of attention are the improvement of rural communications and the improvement of water-supply. In the economic field, the consolidation of holdings may also be thought to merit consideration."

(ii) "The grants to provinces are, of course, not liable to lapse at the end of a financial year. It is important, therefore, that local governments and their district officers should avoid short range schemes or attempts to accelerate accomplishment at the sacrifice of the stability of the results achieved....."

(iii) The schemes should be executed on appropriate contribution from the villagers themselves.

(iv) Sufficient power should be delegated to district officers in matters of the power of the allocation of funds and the actual execution of the schemes, and their periodic inspection but there should be a clear definition of the objects on which the money is to be spent.

(v) The bulk of the grants should be distributed to districts on a rural population basis and the rest should be allocated to specially needy districts, or should be spent in special schemes to meet special needs.

A fairly correct idea of the actual working of the schemes and the nature of the work done by the various rural reconstruction departments in India can be formed from the following account of the activities of the Rural Reconstruction Department, Punjab.

V. Punjab Rural Reconstruction Department. The Punjab has given a lead to the other provinces in rural reconstruction and has been, as a matter of fact, acknowledged on all hands to be the home of the movement. It was in October, 1933 that the Punjab Government appointed Mr. F. L. Brayne to the post of Commissioner, Rural Reconstruction and he has achieved no mean success in the short span of five years. The main work and function of the Commissioner is to "help in increasing the effectiveness of all departments of Government which are connected with the development of the rural areas, by closer co-operation and co-ordination both at the headquarters of the Government and in districts." He is to be a "sorting house for knowledge, experience, ideas and information of all sorts upon the subject of rural reconstruction." The programme published by the Department is as follows:—

PART I

Health, Cleanliness, Thrift and Co-operation.

1. The provision and utilisation of pits for waste and rubbish of all kinds and cleaning and keeping clean and tidy of every village compound and building, be it house, office, school, place of worship, quarter or stable.
2. Cleanliness of person and clothes, particularly of children and the teaching and practising of clean and sanitary habits.
3. Two ventilators for every inhabited room.
4. Complete vaccination and re-vaccination.
5. Control of malaria by making it impossible for mosquitoes to breed in any pool, drain, hole, burrow-pit or

collection of water in any building, compound or village, or along the line of any public work. All such depressions not used for washing or drinking purposes must be either filled, drained or treated with oil or paris green.

6. The abandonment of the custom of boring holes in children's ears and of putting gold or silver ornaments on children.

7. Thrift, saving and cutting down of all unnecessary and unproductive expenditure, particularly on litigation and factious quarrels, social ceremonies, ornaments and drinks.

8. Outdoor games both for children and grown-ups, for the improvement of health and for the occupation of spare time.

9. Girl's education, as the only pre-eminent basis of all happiness and progress in towns and villages alike.

10. All forms of associations, panchayats and co-operative societies for the achievement of the above objects and for the objects of Part II.

PART II

The Increase of Production.

1. Conservation of manure in pits.
2. Better seed, particularly wheat, cotton and cane.
3. New and profitable kinds of crops.
4. More attention to the land in shape of better implements; better methods, more ploughing and weeding, sowing cotton in lines, control of insects, levelling and embanking of fields in hilly and undulating parts of a country etc., etc.

5. Better bulls; the buying and keeping of an approved stud bull to be the hall-mark of a country-gentleman.

6. Discouraging the keeping of superfluous cattle.

7. Control of cattle diseases by tying up separately for a few days all cattle coming from fairs or from other villages.

8. Encouragement of rural industries, where practicable, such as those connected with sugar, oil, lac, fruit, bees, poultry, silkworms, cloth-weaving etc.

The real panacea for a large number of ills is perhaps a well-planned scheme of rural education and it is deplorable that so far little attention has been paid towards it by the agencies engaged in the work of rural reconstruction.

Education and enlightenment alone can change the habits and psychology of the peasants and will put an end to a number of evils. But the greatest care is needed in devising the scheme of rural education, for, unlike the present system, it should aim at promoting love for agriculture and rural life.

A detailed discussion of the problems of indebtedness, consolidation of holdings and other agricultural problems having a bearing on the subject of rural reconstruction will be found in other chapters of the book.

VI. Review. Without shutting their eyes to the creditable work done by the Rural Reconstruction Departments in India, there is a section of people in the country which believes with Dr. Harold Mann who remarked at a meeting of Indian Village Welfare Society at High Leigh, Herfordshire in England, "The problem of the Indian peasant is the problem of filling empty stomachs. Let us find out means by which the peasant should get enough to eat."

Conclusion. Nevertheless the movement has fulfilled a long-felt need and has achieved not insignificant success in ameliorating the condition of the peasantry, in the short period of about five years. It will be too early to review the work done or to describe the changes brought about by the Rural Reconstruction Department in the form of statistics; but the changes are tangible enough. The movement is in full swing in the Punjab and there is a long list of its achievements since its initiation in the autumn of 1933. An officer connected with the movement, in an interview with a press representative, remarked that an idea of its progress can be formed from the increased demand for improved seeds particularly of wheat, cotton and sugarcane. The sales of improved seeds at the depots of agricultural department have been doubled though individual farmers also sell these seeds. The villagers are gradually adopting improved implements of agriculture but the progress is extremely slow. Rapid progress has, however, been made in sanitation. The opposition to vaccination has disappeared though indifference towards it is still to be removed. A large number of villagers in the Punjab has to-day better ventilated homes, cleaner streets and tidier children than ever before. Thousands of manure pits have been constructed to absorb the refuse of the villages and provide the farmer with valuable manure. Campaigns of "clear the village" are being carried out in almost every village. Village sports and rural uplift *melas* (fairs) have become a striking feature of the countryside in several parts of the Punjab and the message of the movement has been carried into the

remotest corners of the province. The officer interviewed, all the same, regrets that if the official drive behind it, is removed it is very doubtful whether the movement will continue.

SUMMARY

The need for devising a thorough scheme of improving the life in rural areas became more and more imperative since the intensity of the world-wide economic depression, severely affecting the agriculturists of our country. Private bodies as well as the government, realising the necessity, devised programmes of rural reconstruction, which aim at remedying all the ills of the countryside.

The first factor to be reformed is the outlook of Labour, about whom much has already been said. Almost all the defects of our agricultural production are supposed to be the result of the shortcomings of the man behind the plough, and if they be removed, Indian agriculture will prosper in all its aspects.

The Central Government contributed a large sum of money for the purpose, giving proper instructions, as to how the money was to be utilized in order to achieve permanent results. If we study closely the working of any of the Provincial Rural Reconstruction Departments—say of the Punjab—we will notice the steps that are being taken in this direction. The programme is divided into two parts; the first concerning such problems as health, cleanliness, thrift and occupation, and second with the means of increasing production.

Reviewing the work thus done some people believe, that all this planning and scheming will be of little avail, unless we remove the heaviest burden from the peasants' path—his poverty, which is becoming more and more acute. One of the officers of the movement, doubted if the scheme could go on without the official drive behind it.

QUESTIONS ON CHAPTER VIII

1. What are the aims and objects of the Rural Reconstruction movement in India?
2. Enumerate the various kinds of wastes going on in Indian village life. How may these be stopped?
3. How can the Rural Reconstruction movement be made more effective than it is at present?

CHAPTER IX

LAND REVENUE.

I. **Historical retrospect.** A share of the produce of the soil was taken by the rulers from the cultivators in India even in ancient times. The laws of Manu mention this practice as a long-established one. According to Manu the share of the state was one-sixth of the gross produce, the amount which was collected at the threshing floor, but it could be raised to one-fourth at the time of war or any such emergencies, which were not of course uncommon. At a later period one-half was considered a common rate.

This system had certain obvious advantages. It was very simple, and clearly understood by all. The share of the state was easily obtained at the threshing floor, in presence of the king's officer and varied according to the yield of the land. There was no elaborate system of revenue calculations, suspension, or remissions. It had, however, certain disadvantages which increased as population grew and extension in the cultivation of land became necessary. The number of King's officers had to be increased. This system, moreover, conferred much power on them, who might not use it judicially or honestly. Very great supervision was necessary to eliminate the chances of cultivator's dishonesty. It was for these reasons that the system was partially modified before it was finally given up in favour of a cash payment. *An estimate of the standing crop was made and the share of the state was determined by appraisers, who acquired a particular skill in this line.

The commutation of grain share into cash payment was attempted by the earlier Moslem rulers but it was in the time of Akbar that a scientific system of land settlement and assessment was introduced by his finance minister Raja Todar Mal. The customary and unwritten usages of the Hindu administration were reduced to a system. Land was measured and property classified. An investigation was made into the productive capacity of each quality. The price of grain was determined for the last nineteen years and on the basis of an average rate of prices the revenue rate was fixed in terms of cash at one-third of the gross produce. Akbar made it, however, optional with the cultivators to pay the revenue in cash or kind. The settlement was made for ten years.

*The system is known as *kankut*.

There was thus a regular system of revenue accounts maintained. Revenue terms were fixed and different officials were made responsible for their respective duties. In many of the states, however, where the system of Akbar did not extend, the basis of assessment was the rate per plough or the soil rate, which was roughly or arbitrarily fixed in terms of grain. The Marhatta rulers, in some provinces where they were well-established, accepted the rates fixed by the Mohammadan kingdoms in Central India, as *ain* or essential rates as a basis of assessment and these rates were raised to the maximum rates called 'kamāl' in the case of the best lands.

Deterioration of the System. The land revenue methods got very lax as the Moghul empire grew old. Instead of bringing about a readjustment in rates with the changes in prices and other factors, the revenue demand was increased by imposing a number of cesses, in addition to land revenue. It is reported that the proportion of cesses to the main assessment went as high as fifty per cent. in certain cases, as in Bengal.

Revenue Farming. As the Moghul Empire grew weaker, the difficulties of revenue collection from outlying posts increased. There was a steady departure from the principles and practices adopted since the time of Akbar. A new system of revenue collection was therefore evolved. The districts were divided into big estates and the total revenue which each one ought to yield was found out from the previous accounts. A local landlord, was authorised to make collection of revenue from each block of land and pay nine-tenths only to the Government.

He was called the Revenue Farmer and he was given full powers for the exaction of revenue. This system began in Bengal and spread to other parts of India also in the eighteenth century. The system got degenerated when the control of revenue collection was given to the highest bidder by means of auction, who could pay the auction money to the Government and retain the remaining amount to himself. In some cases the local chiefs or Rajas, who retained territorial influence were conciliated by being created Revenue Farmers. Necessitated by the weak financial position of the rulers, it, however, led to heavy exaction from the cultivators on the part of Revenue Farmers. They took full advantage of the political disorganisation prevailing in the country and the helpless dependence of the rulers on them for money. Their position, which was created initially by a Royal warrant, was later on determined by bargain.

Growth of the Power of Revenue Farmers. These persons were called Zemindars and though they had not at first any definite right of ownership in land, they developed into such a powerful body that they could not be distinguished from full proprietors. The effect of this system was not, however, uniform throughout the country. In some cases they became big landlords or founded smaller village estates, while in others they either retained overlord rights or left no mark behind and passed away.

In any case this system gave rise to a great complexity in the system of land tenures in India. It made the work of revenue assessment and collection for the British Government very difficult.

II NATURE OF LAND REVENUE.

Is Land Revenue a tax or rent on land? Whether land revenue is a tax on agricultural incomes or a rent on land, has been the subject of much controversy. Those¹ who uphold the latter view-point assert that the Government is the biggest landlord in India and the existing land-owners have only sub-proprietary rights. A natural corollary to this assertion would amount to the claim of the Government to the full economic rent of land, *i. e.*, the total produce after deducting wages, interest and profits and "which in practice may amount to bare subsistence and little more."² It is for this reason that Sir Louis Mallet says, "I shall rejoice to see a limit placed on future assessments, with a view to which the renunciation of the theory of State Landlordism would be the most effectual step."

Under the Hindu and the Moslem rule in India, the Government did not claim exclusive proprietary rights over land. This is the opinion held by eminent writers like Vincent Smith, John Briggs, etc. Abul Fazal in his *Ain-i-Akbari* refers to "numerous owners of property, who hold cultivable land by ancestral descent." Sir H. Maine acknowledges "some preferential rights, whether they can or cannot be called ownership." The British Government could not thus claim any such right on grounds of succession, since its predecessors did not claim it. In a despatch to the Secretary of State, dated 8th June, 1880, Lord Lytton's Government observed :—

"We do not accept the accuracy of the description that the tenure (of land in India) was that of cultivating tenants with the power to mortgage the land of the state

1. James Mill spoke in 1831 of rent of land in India having always been considered the property of Government. Mr. Wilson told the legislative council in 1860 that "land revenue could only be regarded as rent".

2. V. G. Kale, p. 774, *Indian Economics*.

and that land is the property of Government held by the occupant as tenant in hereditary succession so long as he pays the Government demand. On the contrary the sale and mortgage of land were recognised under the native governments before the establishment of British power.It has been one of the great objects of all the successive governments of India since the days of Lord Cornwallis, if not to create property in land, at all events, to secure and fortify and develop it to the utmost. The Government undoubtedly is the owner of a first charge the amount of which is fixed by itself on the produce of all revenue paying land in India; but over the greater part of the Indian empire it is no more the owner of cultivated land than the owner of a rent charge in England is the owner of the land upon which it is charged. If the charge is fixed so high as to leave nothing for the cultivator, such a maintenance as will keep him from deserting the land, it may of course be said either that property in land does not exist or that it is worthless".

The Taxation Enquiry Committee have also stated that both the Hindu and Moslem rulers never claimed the absolute or exclusive ownership of the land and definitely recognised private property in it.

Except in the cases of lands where it is the immediate owner, the British Government has everywhere conferred or recognised a private right in land. In large areas of the country, for example, Bengal, Oudh and the whole of Northern India, it has expressly declared the proprietary right of the landlords and the village-owners. This is the observation of Baden-Powell. So far as landlord estates are concerned, private property is undisputed. It is however, in the case of ryotwari lands, where though similar considerations apply, an exact and general definition of the position of the landholder cannot be arrived at, according to some writers.

Though the government in India performs some of the benevolent functions of a landlord *e. g.*, advancing of loans, the improvement of land, it cannot claim to be the owner of privately owned lands. It can, however, regard land as hypothecated to itself, as security for the payment of land revenue, which can thus be recognised as a tax and not rent. The subtle distinctions that are sometimes drawn between a tax and the land-revenue as it operates in India, do not lead us to any definite conclusion. It is, however, worth notice that the Income Tax Act of 1886 exempted agricultural incomes; the Government thus admitted the existence of tax on agricultural incomes in

the form of land-revenue, which therefore has not been recognized as rent on land.

According to Baden Powell "practically the discussion is a profitless war of words.....It operates as a tax on agricultural incomes—a contribution to the state out of the profits of land cultivation, just as the income tax is a contribution, out of the proceeds of other industries and occupations" So far as the landowner is concerned, he does not at all feel interested in this controversy as long as he is free to sell, mortgage, lease, inherit and exercise all other rights of private property in it.

III. LAND TENURES.

Main features of a good tenure. Before the different systems of land-tenure in India are discussed it will be useful to note down below the main characteristics of a good tenure.

1. Fixity. Some kind of fixity of land tenure is essential in the interest of the cultivator as well as the productivity of lands. Ejections should be as few as possible and not arbitrary.
2. There should not be frequent enhancement of rents.
3. It should encourage improvement of land and investment of capital in it.
4. Though it should protect the cultivating class and promote their material interests, it should not be such as to harm the landed aristocracy, who form the loyalist class, on whom the Government can depend at times.
5. It should ensure a definite amount of revenue to the Government.
6. It should make possible the transfer of tenure.

Land Tenures. It is very essential to understand the system according to which land is held by people in different parts of India before we can discuss the assessment and settlement of land revenue.

The system of land tenure in India has grown very complex and has taken a number of forms due to political changes in the country.

"The system of land tenure in India exhibits almost every conceivable variations, from immense estates, containing thousands of tenants, to minute holdings of well under an acre in size. It is nevertheless possible to classify the holdings into certain fairly well-defined groups."*

There are three main types of land tenure in India, Ryotwari, Zemindari and Mahalwari.

*India in 1930-31.

(i) *Ryotwari*. The individual holder of land is himself responsible for the payment of land revenue, which is assessed on each separate holding and fixed for a period of years. He possesses proprietary rights over his land and cannot be ejected by the Government so long as he pays the fixed revenue. He can, however, relinquish a part or the whole of his land at the end of the official year. He can sublet his land or alienate it to others by gift, sale or mortgage, without the consent of the Government. His successors inherit his land after his death according to the law of inheritance.

(ii) *Zemindari*. For purposes of assessment of revenue, the village is the unit and the Government obtains revenue from individual owners of land, known as zemindars.

(iii) *Makalwari*. Under this system the village community as a whole is responsible jointly for the payment of land revenue. It is in essence a form of *zemindari* tenure, with the difference that there are a number of co-sharers enjoying ancestral rights to land in place of a single landlord. Thus two principal types of villages are found in India, Ryotwari and the landlord joint village.¹

A ryotwari village is composed of owners and cultivators as described above. Such a type of village is found in Madras, Bombay, Berar and Central India.

The second type of village may be owned by an individual landowner² or a number of people who are co-sharers and derive their right of inheritance from their ancestors, where families were connected together. The joint owners may cultivate the land themselves but generally the landlords, whether single or joint, enjoy a higher status than the cultivating tenants. The waste land in a Ryotwari village is the property of the Government though it may be temporarily used by the people, but in the other type of village it is the joint property of the village community and may be used by it to its own advantage.

The village officials, especially the headmen, function as more important figures in a Ryotwari than in a landlord village.

In these joint villages there are three ways in which the holdings are retained and the produce and the profits

1. "This type of village is particularly strongly developed in the Punjab and mostly connected with Mohaminadan ideas, as contradistinguished from the Ryotwari village, which is associated with Hindu Government and Hindu ideas." Jathar and Beri—Indian Eco : p. 36.

2. Some landlord estates extend over a larger area than a village ; each individual village being compared in the same manner.

of land are shared. First, there is the ancestral village where the land is held either undivided like the joint undivided Hindu family or on a 'pattidari' tenure. In such a village the revenue burden follows the share of land irrespective of its relative value, *i. e.*, each co-sharer pays according to the fraction of land held by him. If a holder pays one anna revenue out of a rupee worth assessment, it means he possesses one-sixteenth of the total land, no special regard having been paid to the relative productivity of his holding.

When a village is divided on this principle and the share of revenue allotment shown on the '*bāchhi*' (the list of revenue distribution) corresponds to the fraction of land, it is called Pattidari System of tenure.

The Pattidari System may be an imperfect one. Only a part of the land may be so divided. A portion of the old cultivated area and waste land may remain undivided.

The ancestral shares are, however, rarely found unaltered. "It is also comparatively rare to find that the present holdings correctly correspond to the fractional share; sometimes they do so roughly; in other cases the land shares have altered, but all other profits are still shared on the correct practices: and so the principle is adhered to by the villagers."

Secondly, there is the non-ancestral village (as in the Panjab and elsewhere also) where land is not held according to the ancestral fractional share but possession is the measure of one's right over it. There is the Bhaichara¹ principle and payment of land revenue is made according to the actual holdings and not fractionally.

In the third case the system of *de facto* holdings obtains with no particular system of sharing. The whole village community is a united landlord and the holdings are recognised as they are. The revenue payments are also determined accordingly.²

The formation of these joint village bodies may be due to their having descended from one common ancestor, who was either a conqueror, ruling chief, or a revenue farmer. It may be that they belonged to one particular clan who immigrated at once and commenced joint cultivation or

1. "There are non-ancestral villages where there are special customary systems of sharing under the true Bhaichara principles of (a) sharing in equal lots made up artificially of various strips of land, (b) sharing by ploughs in which land is assigned according to the number of ploughs owned, or (c) with reference to shares in water, or (d) shares in well."—Jather and Beri; p. 396-97.

2. This may be a constitution originally adopted because land was fairly equal in value and abundant, and so each family took what it wanted or had means to cultivate—Baden Powell p. 86.

organised a form of co-operative colony for cultivation of land.

Sub-proprietary rights in land. The Indian land tenures have been formed as a result of many political changes that took place due to conquests, wars, usurpations and rise and fall of ruling families. We do not find any attempt being made for their reshaping. Subsequent to the settlement of a class of people at one place, some farmers grew to prominence and created some overlord rights. These families became less important with the rise of others. There was super-imposition of landed rights and interests one upon the other and subsiding tenures, often permanent rights, were created.

"The different interests appeared on all shades and degrees of strength or weakness : here was a landlord, who had obliterated all rights but those of bare tenancy, below him, there was a landlord whose position was so doubtful that it was a debated question whether he should be recognised at all : here were strong tenants still proudly remembering that their forefathers were once great 'jagirdars' or even territorial chiefs ; there were others whose only anxiety was not to be bound down to the land, but be allowed to give it up directly they felt unable to pay the rent."*

In the ryotwari tracts the landowners were generally the cultivators themselves. Tenants were employed in certain cases and their position was determined by ordinary contract. Certain overlord rights are exercised in a few cases, but the actual owners pay only a fixed rent in such cases.

In the case of zemindari estates there may be a single landlord who is the actual owner of a big tract or has an interest confined to the realisation of a fixed rent charge, or there may be joint or landlord villages, the descendants of some conquering or colonising tribes. In the case of others, there may be a number of intermediary right holders. (1) The immediate landlord, (2) Sub-proprietor, (3) Hereditary or occupancy tenants and (4) Tenants-at-will. Baden Powell has represented landed interests in India from the Government as the source of all rights at the top to the cultivator at the bottom in the following manner. According to him "practically all the intermediate degrees are recognised either (1) as sub-proprietary or (2) as rights of privileged (or occupancy) tenancy wherever the right is sub-proprietary, the holder is owner in full as regards his

*Baden Powell; p. 128.

particular holding : he has, however, no part in the whole estate or its profits, nor a voice in its management."

One Interest :—The Government is the sole proprietor. (Khas estates, alluvial islands, etc., in Bengal.)

Two Interests :—1. Government.
2. The ryot or occupant with a defined title (not a tenant) as in Madras, Bombay, Berar etc.

Three Interests :—1. Government.
2. A Landlord. (Zamindar, Taluqdar or a joint-village body regarded as a whole.)
3. The actual cultivating holders, individual co-sharers, etc.

Four Interests :—

- | | |
|--|--|
| 1. Government. | 1. Government. |
| 2. Landlord. | 2. An overlord or superior landlord. |
| 3. Sub-proprietors, or tenure holders. | 3. An actual proprietor or landlord (usually a village body). |
| 4. The ryot or actual cultivator. | 4. The actual cultivating holders, individual co-sharers, etc. |

IV. TENANCY

Tenant Rights and Laws. Tenancy laws differ as we pass on from one province to the other. In each province the development of tenant rights has taken place on lines peculiar to itself. There are, however, certain features common to all. The growth of landlords and the super-imposition of the rights of other overlords over theirs, gives us an insight into the growth of tenancy. As each dominant grade of landlords grew into power, the lower grades sank into the position of tenants. Thus different classes of tenants arose in accordance with the pressure of power exerted by the classes over them.

Before the British administration some of these have been able to assert their rights and adduce special claims, as being in possession of special rights. Every tenancy act, therefore, makes provision for such classes of protected tenants, who may be called natural tenants.

There were, however, others in whose case definite facts regarding the origin of their tenant rights could not be established. These may be called artificial tenants. There were still some others who enjoyed a privileged position, even

though they were got by the landlords on a contract basis, under special circumstances.

In view of the difficulty of distinguishing between the claims of different classes of natural and artificial tenants, those who were the offsprings of the old landlords and those who owed their position to contract, as rights had become obscured in course of time even in the case of better classes due to their ignorance, the Twelve Year Rule was adopted in Bengal, Agra and to a little extent in the Central Provinces. The aim of the rule was to protect the tenant against rack-renting and arbitrary eviction and also to confer hereditary rights on a considerable number of them.

In Bengal and Agra the Act of 1859 gave a cultivator the position of an occupancy tenant if he held a piece of land continuously for twelve years. The effort of the tenant was therefore, subsequently, to retain the cultivation of a piece of land for 12 years continuously but the landlords tried to baffle the provision of the law by evicting him before the lapse of this period. In Bengal the Act of 1885 was, therefore, passed to protect the tenant. According to this law the tenant has to cultivate any land in the same village for twelve years continuously for the establishment of his occupancy right. The tenants have been classified and rules for their eviction and enhancement of rents have been laid down separately for each class. The Bengal Act of 1885 has been further amended by the Acts of 1907 and 1928. The former attempted to remove certain defects and ambiguities found in the working of the existing law. It gave greater facilities to the landlords for the collection of rents but provided against enhancement of rent by collusive agreements. The latter provided for the transfer of occupancy tenures to the same extent as other immovable property on payment of a mutation fee of 20 per cent. and to enable the landlord to exercise the right of pre-emption on certain conditions. The rights of occupancy cannot be considered in case of sale for arrears of revenue. The Twelve Year Rule cannot save him from ejection if he fails to pay arrears of rent. The position of the under-tenant has also been further improved by the law.

Similar change was not made in Agra, but in 1901 legal safeguards were taken for the benefit of the tenants against the landlord's power of eviction. The Agra Act of 1901 has been amended by the Agra Tenancy Act of 1926 and tenant rights have been defined on the basis of their classification into seven types. In Oudh also the right of occupancy was conferred on tenants who had lost the rights of proprietorship in 1886. There was an extension made in

this law subsequently so as to include their ex-proprietors who transferred land by sale or execution.

In the Central Provinces, the Twelve Year Rule which was applied in the first instance, was given up and an arrangement was made for the purchase of occupancy rights at $2\frac{1}{2}$ times the annual rent. In 1920 the latter rule was replaced by another rule, recognising two classes of occupancy tenants: one of them enjoys absolute occupancy rights, which are hereditary and transferable; subject to the right of pre-emption on behalf of the landlord. The rents are fixed for the term of settlement, but can be enhanced at an interval of not less than ten years. The rights of the other class can be acquired by the payment of a premium of $7\frac{1}{2}$ years rental.

In this province the tenants' position is stronger than anywhere else. The Government determines not only the amount of land revenue at each settlement, but the amount of rent payable by the tenants to the landlords.

"In the zemindari areas of Madras, the rights of tenants have been secured by the Madras Estates Land Act of 1909 which repealed and re-enacted the old Madras Rent Recovery Act of 1865. The main principle of this Act is that every cultivator admitted by the landholder to the cultivation of the estate lands has the status of an occupancy rayat who is protected against eviction so long as he continues to pay the prescribed rates of rent. Enhancement of rent is allowed on certain clearly defined grounds and a non-occupancy tenant also may acquire occupancy rights under certain conditions." The Act of 1880 in Bombay dealing with the Khots afforded protection to the old residential tenants in the same way as occupancy tenants in other provinces. The Punjab is a land of peasant proprietors, who cultivate fifty per cent. of the land. About 40 per cent. of it is cultivated by those tenants, who are not permanent and the remaining ten per cent. by occupancy tenants. The rights of the latter are based on historical grounds. The Act of 1887 defines as occupancy tenants those:

(a) who for two generations have paid neither rent nor service to the proprietor but only the share of the land revenue;

(b) who are ex-proprietors;

(c) who had settled along with the founder and given aid in the first clearing; and

(d) who had been revenue assignees and had remained in possession of the land. In addition to these provisions,

any one is entitled to prove his claim on the basis of any other special facts before a court of law. These classes are entitled to different degrees of privilege, according to the general custom and sentiment on the subject. The rent payment is fixed in all cases in terms of Government land revenue.

In the case of other tenants in the Punjab, enhancement of rent may be made but if they are ejected, they can claim compensation for any improvement that they may have made in the lands.

The tenants in the Punjab have received further protection in the Land Alienation Act of 1900 by preventing the passing away of land from the hands of agricultural classes into those of money-lending classes.

General features of the occupancy privilege. The two main features are :—

(a) Limit to the enhancement of rent and (b) protection against ejectment. These two provisions are complementary. It is no use protecting the tenant against ejection unless the landlord is restricted from enhancing the rent to such an extent that the cultivator is unable to make any profits. Similarly restrictions on the enhancement of rent will not be useful if the landlord can evict the cultivator at any time. The details of these provisions are given in the respective laws of each province. The law provides against ejectment unless special circumstances, mentioned therein, justify it. Enhancement of rent can take place by the mutual agreement of the parties concerned or by the authority of a court of law. In the case of Bengal such an agreement must be in writing and the increase in rent can take place once in fifteen years on the condition that it is not more than two annas in the rupee. When the court is asked to decree a rise in rent it has to consider various factors such as (a) the rent of land in question as compared to the neighbouring lands, (b) rise in prices and (c) the increase in the productivity of land due to the improvement of the cultivators or otherwise. The tenant can, on the other hand, file a suit in a law court for the reduction of rent on the ground of deterioration in the soil or a fall in prices. In Madras rent cannot be increased by more than 12½ per cent. of the existing rent. In the Central Provinces, the settlement officers fix the rent.

The other characteristics of the occupancy privilege are :—

1. The right is hereditary.
2. It can be transferred subject to certain specified conditions, such as the consent of the landlord.

3. In the case of distraint for rent arrears, exemptions of cattle, tools, seed grain and such other things, are allowed and further the cultivator cannot be turned out without notice served at the proper time. The payment of rent by instalments, after the harvest is reaped, is also required by law.

4. Whenever the Government grants to the landlords remission or suspension of land revenue in a bad year, similar benefits shall also be granted to the tenant by the latter.

5. The tenant's right of making improvement in land is also protected and rent cannot be increased on this account without compensation.

These features of the occupancy privilege embodied in different laws confer the benefits on tenants similar to those of land legislation in Ireland, the three F's, as they are called, *viz.*, fair rent, fixity of tenure and free transfer.

Other Tenants. The occupancy tenants are thus the most important class, enjoying distinct privileges among the whole mass of tenants throughout the country. There are, however, certain classes of tenants, who enjoy either a higher or a lower status than this. Mention has already been made of "Absolute occupancy tenants in the Central Provinces, whose rents are fixed by the Government." Certain inferior tenants also enjoy a degree of protection, which is not ordinarily available to tenants-at-will.

There are the 'tenure holders' in Bengal and ryots at fixed rates whose rents cannot be enhanced and who cannot be ejected. In the United Provinces also, in the permanently settled districts of Benares, tenants, who pay a fixed rate of rent, can also be found.

Ryotwari Provinces. In Madras, Bombay, Berar and Assam there are no doubt some landlord estates, most of which have been dealt with by special tenancy laws, but generally the artificial growth of middlemen and landlords or a variety of sub-proprietary right holders or ex-proprietary tenants has not taken place. There is no particular necessity therefore, for the recognition of sub-proprietary or tenant rights by law as it exists in other provinces. In these Ryotwari Provinces, the tenants are not protected by any special law so far as the enhancement of rent and eviction are concerned. The ordinary tenancy laws and the local usages are supposed to be enough for the enforcement of agreements between them and their landlords, though the necessity for special legislation is growing even here.

The Future of Tenants. Changes of a far-reaching nature will result when tenancy bills, that are before the United Provinces and the Bengal Governments, are passed. The position of the tenants vis-a-vis the landlords will be considerably strengthened.

SUMMARY

The practice of obtaining a share out of the produce of the soil can be traced to very old times in India. The difficulties of collecting Government share in terms of kind were finally responsible for its commutation in terms of cash. Akbar was the first ruler to introduce a scientific system of land revenue settlement and assessment. With the decay of Mughal Empire these revenue methods deteriorated. A new system called Revenue Farming was introduced. This system became oppressive to the cultivators as the power of the revenue farmer grew. Is land revenue a tax or a rent on land? It was always considered a tax in old times. Several people, whose opinion is to be credited, support the statement that it was always considered a tax and should therefore be regarded as such. The British Government has recognised private proprietary rights in land.

There is a complexity in the system of land tenures in India. The chief features of a sound system are fixity and freedom from frequent enhancement of rents. Three main types of land tenures exist in India: Ryotwari, Zemindari and Mahalwari. These depend on the constitution of villages, which are classified on the same basis. There are thus Ryotwari, Zemindari and joint villages. In the last type of village the holdings are retained and the produce and profits are shared on:

- (a) The pattidari system in the ancestral village,
- (b) The Bhaichara system in the non-ancestral village, and
- (c) The 'de facto' holding system.

There are sub-proprietary rights in land and more than one interest in it. It has got a historical reason for it. Each province has its own laws for the protection of tenant rights. There are laws for the benefit of tenants-at-will and those conferring special privileges on occupancy tenants. General features of the occupancy privilege are summarised in the three F's, fair rents, fixity of tenure and free transfer, the three conspicuous characteristics of land legislation in Ireland.

QUESTIONS ON CHAPTER IX

1. Write a short historical note on Land Revenue in India. Refer in particular to the system of revenue farming.
2. Discuss fully the statement:—Land Revenue in India is a tax and not rent on land.

3. Describe very briefly some of the principal systems of land tenure in India. (P. U. 1924)

Or,

Characterise the principal types of land tenure in India (P. U. 1920)

4. What in your opinion are the characteristics of a good system of land tenure? Examine any of the leading tenures of India in the light of your views? (P. U. 1929)

5. Compare the tenancy systems of this province with that in the United Provinces, Bengal and Bombay. (P. U. 1930) (B.A. (Hon)

6. Describe the main features of the tenancy legislation in India. (C. U. 1920)

7. Write a short historical account of the tenancy legislation in Bengal. (P. U. 1920).

8. What are the main features of the occupancy privilege? Refer to the laws existing in different provinces in this connection.

CHAPTER X

LAND REVENUE (*Contd.*)

I. **Land Revenue Settlements.** After dealing with the system of tenures, it is possible to study the manner in which the Government fixes its demand for land, whether it is in the form of landlord estates, village estates or separate holdings. The determination of this demand involves certain preliminary operations for the preparation of a complete record of land and rights connected with it, and thereafter the assessment can be made. The record defines clearly the position of the holder of land in some cases and gives not only the local designation or the tenure but also fixes the amount which a sub-proprietor or a tenant has to pay to the person, who possesses a superior right. "And just as the nature of the tenures determines the form of settlement and what rights have to be recorded, so also it affects the method of assessment. According as we have to determine a lump sum which a landlord or a landlord Village collectively, has to pay, or a separate charge for each holding a unit of survey, so different methods of valuation have been found convenient. Hence it happens that several kinds of settlement have been locally developed. But primarily the question which kind of settlement should be adopted, has always depended on what kind of tenure is generally prevalent."* The first requisite of a land revenue settlement is the preparation of the Cadastral Record.

The Cadastral Record is a complete record of land and all the rights pertaining to it. This is prepared by a detailed survey of land and demarcation of its boundaries, defining each kind of soil. The village map is a very important part of the record. It gives details of different holdings and the nature of land—cultivable and waste. The field register and the revenue record are also its necessary enclosures. The latter gives a correct list of the revenue payers and their holdings. There are statistics given in it which reveal the past history and the present condition of the land and the village.

Not only does the record deal with the interests of different right holders *viz.* landlords, sub-proprietors, tenants etc., but it also registers all changes made in such rights by sale, gift, mortgage etc.

These records are very valuable and are the basis of all legal rights in land. The preparation of the Cadastral Re-

* Baden Powell p. 147.

cord leads to the assessment of revenue. A valuation of the land is made, the revenue rates are ascertained, totalled up and adjusted. Thus the sum payable by each estate or holding is determined. In some cases it is necessary to distribute this total sum among different co-sharers, and also to adjust tenant rents.

After the preparation of the Cadastral record and the assessment of land revenue, the next stage of land revenue settlement is its collection. It is realised in such instalments as will suit the convenience of the taxpayer. The revenue is collected after the harvest is reaped and opportunity is afforded to the land-owner for marketing the crop. When land revenue falls in arrears the Government adopts coercive measures for its realisation. In the case of permanently settled areas these measures are very rigorous and leads to the immediate sale of the estate but in the case of others under temporary settlement the sale of the land is the last step taken. The Government grants suspensions and remissions of revenue under extraordinary conditions facing the cultivator, when he is unable to pay land revenue, such as floods, failure of rains or source of water supply. Such concessions are not granted in the permanently-settled zemindari areas.

II. CLASSIFICATION OF SETTLEMENTS

The first basis of classification has reference to the time for which the settlement is made. Where the revenue demand has been fixed once for all in perpetuity it is called Permanent Settlement. In those areas where the rates of assessment are revised after a certain period, it is called Temporary Settlement. The period varies in different provinces: it is thirty years in Bombay, Madras and the United Provinces, twenty years in the Central Provinces and forty years in the Punjab.

The second basis of classification follows the three systems of land tenure already discussed. Baden Powell describes these in the following manner:—

1. Settlements for single estates under one land-lord; usually large estates but not always.

Varieties—(i) Settlement with Zemindars *i.e.*, permanent settlement of Bengal and North Madras.

(ii) Settlement (temporary) in Bengal of estates and districts not subject to the permanent settlements.

(iii) Settlement (temporary) with Taluqdars of Oudh.

2. Settlement for estates of proprietary bodies, usually village communities.

These are called mauzawar or mahalwari settlements.

Varieties—(i) Settlement of the United Provinces of Agra and Oudh (including Oudh for villages that are not under Taluqdars).

(ii) Settlement of the Central Provinces (called the malguzari settlement).

(iii) Settlement of the Punjab.

3. Settlement for individual occupancies or holdings.

Varieties—(i) The Ryotwari System of Madras.

(ii) The Ryotwari System of Bombay and Berar.

(iii) Special systems (in principle Ryotwari, but not officially so called) of Burma, Assam and Coorg.

Some of the more important types of settlement are necessary to be explained in detail.

III. PERMANENT SETTLEMENT IN BENGAL

In the beginning of this chapter a reference has been made to the disorganization prevailing in the Indian revenue system after the decline of the Moghul rule in India. The systems of revenue farming and the selling by public auction the annual leases for the collection of revenue were introduced to stabilise the land revenue income and to get out of the chaotic conditions prevailing at the time. All these measures, however, proved a failure, and even disastrous to the cultivators. The proposal for fixing the land revenue in perpetuity was first suggested by Francis and was adopted by Fox in his India Bill. It was, however, recommended by the Court of Directors to the authorities in India in 1785. In 1793 Lord Cornwallis adopted the permanent settlement in Bengal after making enquiries, which lasted for about three years. The aim of this measure was to confer a special legal status on the zemindars, who would be able to fulfil their obligation to the Government on the one hand and improve their estates on the other.

The land revenue demand was fixed roughly at ten-elevenths of what the zemindars received as rent from the cultivators, the remaining portion *viz.*, one eleventh was left to the zemindars in return for their work and responsibility. This assessment was not determined after a regular survey of land and its rights or an inquiry into its productivity but in a rough manner. The zemindars were proclaimed full proprietors of land and the settlement was declared permanent and unalterable and the Government undertook not to make any demand upon them or their heirs or successors "for augmentation of the public assessment

in consequence of the improvement of their respective estates."

The land revenue thus fixed was to be paid regularly and a failure to fulfil this obligation would make the estate liable to be sold. In addition, the Government reserved the right of introducing any measure for the protection and welfare of the dependant taluqdars, ryots and other cultivators.

Extension of Permanent Settlement The system was adopted in Benares in 1795 where arrangements were made with one of the chief co-sharers or some other important persons in the joint landlord villages. In Madras, also attempts were made to introduce the system. Though the Ryotwari system subsequently proved to be the better one, it was found that between one-fifth and one-third of the presidency had already been brought under the permanent settlement before the former was authoritatively adopted. The advantages of the permanent system and its extension to other provinces were seriously discussed later on, both under the rule of the Company and the Crown, but these proposals did not materialise.

Merits and demerits of the Permanent Settlement. (1) It has ensured a fixed and regular income to the government. This advantage was particularly significant at the time of the introduction of the system.

2. The zemindars have been benefitted considerably and their power of resistance to famines and other calamities has considerably increased.

3. It has developed a strong educated and influential class of people and the Government can depend on them on many occasions. The growth of a landed aristocracy, similar to that in England, has been one of the aims for the introduction of the system, according to certain people. This landed aristocracy can do immense good to the community by introducing measures of social and economic reform in addition to those for the improvement of agriculture in villages.

4. As compared to temporary-settled districts, the investment of capital is encouraged. In the Ryotwari System the relations between the state and the ryot are direct. Though there is no fear of oppression, the decision of the settlement officer in fixing the assessment or in enhancing the land revenue may not be equitable. There is, thus, a likelihood of less investment of labour and capital under such a system.

5. It put a stop to the official oppression, to which the people were subject before its introduction.

6. The worries and expenses involved to the Government in periodic settlements and re-assessments are eliminated.

7. The value of landed property has increased.

8. The growth of personal relations between the landlords and the tenants have been observed.

9. Where the rents are light, the cultivator cannot be subject to the tyranny of the money lender.

10. Temporary settlements involve harassment to cultivator at the time of revision and tempts him either to abandon or neglect the cultivation of land deliberately.

Defects. 1. The settlement was made without the necessary preliminary survey of land and landed rights. This was among other reasons due to the fact that an elaborate enquiry was neither possible in the absence of trained staff nor politic, as it would arouse the distrust of the landlord. Baden Powell has, however, remarked, "The fact that the permanent settlement was made without any survey, and without any record of landed rights and interests, has proved more fraught with evil consequences than perhaps any other feature of the settlement."

2. The interests of the cultivators were left at the mercy of the landlords, who did not take any care for the safeguarding of their interests. In fact, they were actually rack-rented. The rigour with which the assessment was realised also told heavily upon the tenants. It was found necessary by the Government later on to pass special laws in their favour.

3. The Government has suffered a loss in revenue, since it has not been able to increase its demand with an increase in the productivity of land even when it has been caused by the construction of public works. The advantage of a fixed and stable revenue has been obtained at a very heavy sacrifice. The zemindars have prospered with no corresponding benefit to the Government or the tenants.

4. Even the expectations of the originators of the scheme for the growth of a dependable landed aristocracy have not been entirely fulfilled as the zemindars do not always support the Government. Moreover, even in provinces with temporary settlements, the zemindar class has not been less loyal.

5. Some people assert that this measure has been responsible for diverting the enterprising classes in Bengal more towards land than other industrial occupations.

6. The hope, that the zemindars would introduce measures for the uplift of the cultivators, has not been realized. Though there are several benevolent and enlightened landlords in Bengal, just as they are found in the other temporary settled provinces, many evils, such as those due to absentee landlordism, the management of estates by unsympathetic agents, leading to unhappy relations between the landlords and the tenants, and the increase in the number of middlemen and tenure holders, have all been found here also.

IV. TERMS OF SETTLEMENT

After dismissing the subject of permanent settlement, the period of settlement is the next consideration. Opinions differ on this point and suggestions are made in favour of periods ranging from ten to ninety nine years. Those who are in favour of short periods of settlement urge that the Government, by revising its revenue demand after a short interval, can get an adequate share out of the increase in the income of land which might have been brought about by improvements affected by it. In the same manner it can make possible a speedy relief to the agriculturists in the event of falling rents and prices. The tax-payers cannot resent the small periodic increases after short intervals, with which they become familiar as compared to the larger enhancements which will be necessitated by long-period settlements. In a country where rapid progress is being made in the development of its economic resources, this consideration is a very important one. The opponents of this principle, however, contend that long-period settlements are less disturbing to the landowner and he feels no apprehensions, regarding taxation, of improvements carried out by him.

In a scientific system of assessment the period of settlement should neither be very short nor very long and should try to reconcile both the extreme points of view. A fairly long period of settlement is, however, favoured by a large number of people. In the Punjab the period of settlement has been extended from 20 to 40 years.

Mahalwari Settlement. *Main principles of assessment.* There are certain general principles adopted in the Mahalwari settlements in Agra, Oudh, the Punjab and the Central Provinces, though there are differences in the details peculiar to each province.

The Government demand of land revenue consists of a portion of the assets of land annually received. These assets consist of (a) the total annual rents actually received, (b) the estimated rental value in the case of land held by the

owners themselves or allowed to be cultivated free of rent and (c) miscellaneous profits, for instance those from waste land, income from grazing, fruits and wild products. As a matter of fact, the first two items are the chief determining factors. The actual fraction of the assets claimed by the Government has varied from time to time. In the beginning under the East India Company it was over 80 per cent. and now it comes actually to less than 50 per cent.

Ryotwari Settlements. *Madras* :—The actual survey of each village and the preparation of a descriptive register are necessary for assessment. The productive capacity of each kind of land is determined in terms of one of the crops, the money-value of which is found out on the average of the prices prevailing during the last twenty years. The net produce is determined after deducting expenses of cultivation, and half of the net value is fixed as the maximum land revenue. Reductions are, however, made on account of many variable factors.

Bombay :—The general features are the same as above but the method of assessment is different. The different areas of land are grouped together on the consideration of climate and productivity. The total revenue demand is determined for each area and next the revenue liability is apportioned in detail.

Incidence of Land Revenue*. "The incidence of the revenue charges varies according to the nature of settlement, the class of tenure, and the character and circumstances of the holding. Under the Permanent Settlement in Bengal Government derive rather less than £ 3,000,000 from a total rental estimated at £ 12,000,000. Under Temporary Settlements, 50 per cent. of the rental in the case of zemindari land may be regarded as virtually a maximum demand. In some parts the impost falls as low as 35 and even 25 per cent. and only rarely is the proportion of one-half the rental exceeded. In regard to Ryotwari tracts it is impossible to give any figure that would be generally representative of the Government's share. But one-fifth of the gross produce is the extreme limit, below which the incidence of the revenue charge varies greatly."

V. PRINCIPLES OF ASSESSMENT

Determination of the Share of the State. When the permanent settlement of Bengal was introduced the Government fixed its share of rent at a very high level. Subsequently in the temporary settled districts the share of the state had to be fixed at a lower rate and one equal to two-

*Indian Year Book, 1937-38.

thirds of the net assets was considered equitable. In 1885, however, this question was reviewed in the Northern India and one half of the net average assets and not two-thirds was fixed as the share of the Government in the temporary settled zemindari tracts. These orders which were issued in this connection are known as the "Saharanpur Rules."*

Rules of Assessment. The basic principles of land revenue assessment differ as we pass on from one province to another. Except in Bombay, the land revenue is fixed so as to represent share of the net and not of the gross produce.

In the United Provinces, the Punjab and the Central Provinces, it is based upon rent, which is actually paid, or that portion of the gross produce of the land which could be taken by the landlord, if it were given on rent. In Madras and Burma, the net produce represents the difference between the estimated value of the gross produce and the expenses of production, calculated on a liberal scale.

The settlement officer is allowed to exercise his discretion, especially in the application of standard rates to individual cases, keeping in view the difference in local conditions.

In Bombay assessment is not based on definite calculation of the net produce but general economic considerations such as the nature of the soil, the economic condition of the area, the past revenue history, the price level and the value of land.

In different provinces there are rules for the relaxation of settlement. The rules of settlement are not, however, very rigid and a certain degree of elasticity is introduced by some modifications or relaxations made in these at different times, for instance :—

(a) Grant of exemptions from assessments, for a temporary period or even permanently, in the case of increase of income due to private improvements such as tanks, wells, etc.

(b) Grant of concessions in the cultivation of waste land.

(c) Reduction or total remission of land revenue demand in case of failure of crops.

The sudden enhancements of the state demand is also avoided.

*These rules are called Saharanpur Rules because "they were issued in connection with the re-settlement of the land revenue of Saharanpur district."

Rent as a basis of assessment. That rental value, customary, controlled or assumed, should be the basis of assessment, is a controversial subject. In support of their claim, the upholders of this procedure assert that this is the best method of ascertaining the profits from agriculture and it is more definite and precise than any other alternative one. When this method of assessment is adopted, the work of the settlement officer can be checked in a much better manner than in the other one, which depends on a number of variable factors, like crops, prices, development of means of communication. There are, however, certain objections raised against this method and the trouble that grew at Bardoli a few years back is being quoted in support of their statement to prove that it will lead to over-assessment.

The rents actually paid by the tenants, which are the basis of assessment, may be higher than the economic rent due to the following reasons :—

(1) There is a keen competition among the tenants and a scramble for land, leading to the payment of very high rents.

(2) A tenant may pay a higher rent, not because of its high productivity but for reasons of nearness to the land which belongs to him or is already under his cultivation.

(3) A part of the rent paid may be actually the interest on capital given on loan by the landlord to the cultivator.

(4) Due to the landlord being in the position of a creditor he may exact unreasonably high rent from the cultivators, who are the debtors.

(5) Rent may be paid not only out of the produce from land but from other sources also.

The rent to be paid by the cultivators may have been determined with reference to the produce obtained during prosperous years, subject to a deduction during bad years and hence it may be a very incorrect guide for assessment purposes.

It is, however, agreed generally that rental values can be used safely as a guide in revising assessment, provided the statistics are collected and sifted with great care.

“Further even where the statistics of rental value appear to be fairly satisfactory in quantity as well as quality, their indications should be tested with reference to other factors such as communications, market prices, economic conditions, crop experiments *etc.*”*

*Jathar and Beri, Indian Economics.

The Ricardian theory of rent cannot be applicable to the assessment of land revenue in India. Economic rent, according to this theory, is a surplus over and above the cost of production. It is not correct to agree with the view that land revenue is always a part of this surplus. Many holdings in India are uneconomic. Due to his conservatism, absence of alternative occupations, lack of subsidiary industries, the cultivator sticks to land and pays as rent, not the true economic rent but more than that. Similarly in calculating the surplus of land per the cultivating proprietor his own labour and that of his family are not reckoned. Thus it is correct to say, in the words of Professors Wadia and Joshi that, "The land tax is not the appropriation of the unearned increment of the soil, it is the appropriation of the bare minimum of subsistence left to the cultivator." "The economic rent bears no certain and definable relation to the assessment, though we are not prepared to say, that in every case the land revenue impinges on income that is not earned."*

Briefly speaking we come to the conclusion that the Government assesses revenue on land, even when there is no surplus according to the Ricardian theory. In every province there are rules for the suspension and remission of land revenue in the case of extraordinarily unfavourable circumstances to the land-owner but this provision does not invariably help him; and land revenue is paid not out of the surplus but what should otherwise constitute his expenses of production.

VI. RECOMMENDATIONS OF THE INDIAN TAXATION ENQUIRY COMMITTEE 1924-25

The Committee suggested recommendation for the standardization of land revenue for the whole of British India. In each Province the land revenue should amount to not more than 25 per cent. of the annual value. The annual value should be determined by deducting the expenses of production, including the value of labour put in by the cultivator and the other members of his family and that of his enterprise, from the gross produce obtained from his land. The local taxes, which are imposed in addition should be about 25 per cent of the land revenue.

The adoption of the Annual Value basis of assessment is, undoubtedly, an improvement on the other one, since it is more precise, just and scientific.

Rate of Enhancement. At the time of reassessment of land revenue, a general increase of 25 per cent. is considered a suitable maximum to be adopted, though the circumstances of each place may justify a divergence from it.

*Wadia and Joshi.

VII. APPLICATION OF THE PRINCIPLES OF TAXATION TO LAND REVENUE

Land revenue in India may be studied with reference to the four canons of taxation enunciated by Adam Smith.

1. **Equality.** In the payment of land revenue there are not only disparities between different provinces but between different districts also. The differences between temporary and permanently settled areas are striking. So the principle of formal justice, which is studied under the principle of equality, is violated.

That land revenue does not conform to this important principle of taxation, is obvious, when it is compared with income tax. The chief points of difference between the two taxes are :—

(i) Land revenue is not subject to tax-free minimum limit as income tax.

(ii) Land revenue is not progressive.

(iii) The percentage of tax to income in the case of land revenue is much higher than in the case of income tax.

(iv) Income tax is imposed on individuals on the basis of their income while land revenue is not assessed on individual holdings. In the case of the latter, averages are determined and as such, some holdings pay more and others less. As has been said previously, there are uneconomic holdings and the land revenue is not always paid out of the cultivator's surplus.

It is highly desirable that some sort of progression ought to be introduced in the case of land revenue. The grant of exemption below a certain minimum, though otherwise desirable, may not be warranted by financial considerations.*

(2) **Certainty.** The tax payer knows when and in what manner he has got to pay land revenue and thus it satisfies the principle of certainty. The period of settlement is fixed.

A certain amount of uncertainty arises from the vagueness of the basis of assessment and consequent appre-

*The taxation Enquiry Committee has tried to prove that the state share out of the produce of land has diminished from 1903 to 1924. The principle of ability is thus being increasingly satisfied.

It is not possible to speak in definite terms regarding the general burden of land revenue.

In the words of Jathar and Beri, "five possible criteria may be applied namely, (1) the ratio borne by the land revenue to the population ;

(2) the ratio borne by the land revenue to the occupied area, that is the average assessment per acre ;

(3) a comparison of the assessment per soil unit ;

(4) the ratio borne by the assessment to gross or net produce ; and

(5) the ratio borne by the assessment to rents or annual value."

hensions regarding enhancements, whenever they are made.

(3) **Convenience.** This principle is satisfied as the land revenue is paid in instalments, convenient to the taxpayer. The principle is, however, violated in some respects, though, thereby, the object of certainty is achieved.

First, the system of averages, on which assessment is based, inflicts a hardship on the cultivator. In a period of scarcity he is not able to pay the same amount as he can in a year of bumper harvest. The system of remissions and suspensions is not elastic enough to save the cultivator from borrowings in bad years. Unless land-revenue has had to be suspended successively for three harvests, remission is not permissible. A suspension is allowed only when a crop is lower in yield than what is known is a four-anna crop.

Secondly, sudden enhancements after long periods of settlement are very embarrassing to the tax-payer.

(4) **Economy.** There is an elaborate machinery for the assessment and collection of land revenue, but the whole establishment entrusted with this work is discharging many other grave responsibilities. Thus it cannot be asserted that the charges of collection are heavy.

VIII. FORMS OF TENURE AND LAND REVENUE ASSESSMENT IN THE PUNJAB

After dealing with the problems of land tenure and assessment in general for the whole of India, a brief mention may be made of these with particular reference to the Punjab.

The tenures here are the result of historical growth and development of the Province. In the Central and South Eastern parts of the Province, the evolution was in the form of joint villages. In the South West Punjab, the population was largely nomadic and pastoral when it came first under the control of the British Govt. The construction of a well or actual breaking up of the soil gave them rights of ownership. The theory of joint ownership of the waste land within the boundaries of their villages was introduced later on. Special classes of proprietors, 'chakdars and silladars' grew here. In the North West Punjab villages grew not as agricultural settlements but as strongholds for mutual protection. In the Himalayan areas also, joint villages grew due to the combination of hamlets. In certain parts there are, however, proprietors holding lands within the estates of village communities. They are not members of the village communities and do not share their common gains or liabilities.

When the British took control of the Punjab, official terminology for different tenures was used. The zemindari villages were either 'khalis' (simple, where there was still one individual landlord) or 'mushtraka' (joint, where there was a body of descendants, enjoying rights as co-sharers).

The term 'pattidari' was meant to indicate not merely the division of land among family members "but that the property was held, more or less closely in accord with equal fractional shares of the law and custom of inheritance."¹

"The term Bhaichara as first used in 1796 properly indicated a special variety of landlord village; but Bhaichara now means any form of village where possession is the measure of right, or where ancestral fractional shares were not respected in allotting the shares originally."²

The Punjab is known as the province of the cultivating proprietor. There are, however, a number of tenancies, varying from occupancy tenures to inferior types.

A very important step was taken by the Government in the cultivation of its waste land in areas which have been colonised and rendered fit for cultivation by irrigation projects. These waste lands, when they became fit for cultivation, were divided into villages of convenient size and granted to settlers from old districts. Some villages were, as a whole, either let out on payment or granted in lieu of Government services. More usually the lands were divided into separate plots and granted to new settlers as occupancy tenants on certain conditions, such as adoption of permanent residence, improvement of land by scientific agricultural methods etc.

Some years after their settlement and after having shown sufficient interest in their new colonies, the majority of grantees, who did not hold on special conditions, were allowed to purchase proprietary rights in their tenancies. "The rent paid by the Government tenants usually takes the form of the land revenue, which is payable by owners generally, plus an additional malikana³" which is very small.

"Taking the British districts of the province as a whole it may be estimated that about one-sixth of the area is the property of the Government, the remaining five-sixths belonging to private owners."⁴

Settlement. The period of settlement is now forty years. The assessment of land is made on the basis of net

1. Decennial report of the Punjab Government.
2. Decennial report.
3. Ibid.
4. Decennial report of the Punjab Government.

assets which means "the average surplus which the estate may yield after deduction of the expenses of cultivation including profits of stock and wages of labour". This surplus is determined on the basis of rents, where they are fairly competitive. The calculation, however, becomes very difficult, if not, inaccurate. "The net assets of an estate mean the average surplus, which the estate may yield after deduction of the expenses of cultivation. A full fair rent paid by a tenant-at-will, though sometimes falling short of the net assets, may, generally, in practice and for purposes of assessment, be taken as a sufficiently near approximation to them on the land for which it is paid. When, therefore, the entire land of a tract is let to such tenants paying such a rent, the net assets of the tract can be easily calculated if the tenants pay rents in cash. If the rents are cash rents, fixed in quantity, the calculation becomes more difficult on account of inevitable variations in price over a term of years. If the rents are produce rents fixed as a share of the crop, the difficulty becomes greater still, as character, quantity and price will vary. In most of the districts of the Punjab, difficulties of this latter kind are met with, and an additional difficulty lies in the fact that a large proportion of the cultivated land is not let to tenants but cultivated by the petty proprietors themselves. The calculation then becomes not only difficult but hypothetical and the results of greater uncertainty and less value²."

"The usual form of demand is an assessment fixed for a term of years and realisable (subject to suspensions and remissions) in good and bad years alike, but systems of fluctuating assessments, under which the harvest demand is ascertained by the application of sanctioned rates to the harvest area, have long been a feature of the Punjab land revenue administration³."

IX. NEW BASIS OF ASSESSMENT

Sliding Scale. The Land Revenue assessment rules were passed in 1929, according to the Act of 1887. The principle of the sliding scale system of assessment was introduced in 1935. These have been formulated in connection with the resettlement of the Lyallpur District.

The main characteristic of the new system is the adjustment of the land revenue demand annually according to prevailing prices. The standard rates of revenue have been fixed with reference to average price during the last

1. Decennial report of the Punjab Government.
2. Douie's Settlement Manual 1930 Appendix I.
3. Decennial report of the Punjab Government.

twenty years. These rates are enforced only when the actual prices are on the same level as "commutation prices" on which they are based. If the prices have fallen, remission in land revenue will be granted to the extent of the difference between the commutation prices and actual prices. If the prices are, in any year, higher than the "commutation prices", the benefit will go to the revenue payer. According to the Government statement, "While Government will be bound not to exceed the maximum rates so fixed, they will give to the revenue payer, the full benefit of the fall in prices, however great that might be." The actual prices taken into consideration are the prices at which the crops are sold during the previous year, as land revenue begins to be realised before the marketing of crops is complete.

The statement mentioned above further states :—

"In what has been said above, it has been assumed that the commutation prices, as sanctioned, will give for each assessment circle, in accordance with the standard of one quarter net assets, revenue rates which are not on the average more than 25 per cent. in excess of the revenue rates imposed at last settlement. Under the law, as it stands at present, Government cannot impose revenue rates in an assessment circle as a whole which are more than one quarter in excess of those imposed at last settlement, and unless the law is amended in this respect before the assessment is announced, this provision will impose an independent limit to the maxima rates which Government can fix. If, therefore, the sanctioned commutation prices give rates which are more than 25 per cent. greater than the rates imposed at last settlement, Government will have to reduce the rates accordingly."

In calculating remissions based on the actual prices the following factors are borne in mind :—

- (1) The percentage of the total matured area under each important crop.
- (2) The average yield per acre of each of these crops.
- (3) The commutation price assumed for each of these crops.

These new principles of assessment have been formulated with the main purpose of giving relief to the landowner in the period of falling prices and thus it has come as a boon in this period of agricultural depression. It would be worth while extending these to the whole province. These, however, do not take into consideration the factor of cost, which may not vary in the same proportion as prices.

"If the fall in costs is less than the fall in prices, net assets must decrease in a proportion greater than prices, and a revenue demand reduced in proportion to the fall of prices alone (matured area and yield remaining unchanged will take more than 25 per cent. of net assets)¹"

The comparative inelasticity of costs will thus always work against the cultivator.

"It is remarkable that in formulating the principles of remission the Government should have forgotten costs of cultivation altogether. One would very much like to know why they have assumed that costs vary as prices when they know perfectly well that they don't. Are the Government prepared to reduce water rates in the same proportion in which prices fall? Have they ever done so?"²

SUMMARY

How does the Government fix its demand on land? Certain preliminary operations for the preparation of a complete record of land and rights connected with it are necessary. The first requisite is the preparation of the Cadastral Record. This record prepares the way for the assessment of land revenue. The next stage is the collection of land revenue and detailed procedure for it is laid down.

Settlements have been classified on the basis of different considerations. There are three classifications mentioned.

1. **Temporary and Permanent Settlements.** Permanent Settlement of Bengal: its history. Peculiar political conditions in Bengal led to this move. Land revenue demand was fixed in perpetuity at 10/11ths of rent. It was seriously proposed to extend it to the whole of India, but the proposals did not materialise. Though it improved matters for the time being, it was realised after some time that it had serious disadvantages and the expectations of the originators of the scheme were falsified.

On the issue of term of settlements opinions differ. Long and short periods have each of their advantages as well as disadvantages. A scientific system is a compromise between the two.

2. **Mahalwari Settlements.** There are certain general principles common to all these settlements though they differ in details. The actual fraction of the assets claimed by the government is less than 50 per cent.

(3) **Ryotwari Settlements of Madras and Bombay.** Principles of assessment: In the beginning the Government demand was fixed at a high rate. Later on it was reduced. Each

1. Prof. Brij Narain's *India Before the Crisis*.

2. *Ibid.*

province has its own rules of assessment. Can rent form a correct basis of assessment? This method is considered more reliable than the alternative one, but many objections are raised against it and it is asserted that it leads to over-assessment. The method is to be used with great caution.

The Ricardian theory of rent is not applicable to land revenue in India. The Taxation Enquiry Committee suggests standardization of land revenue for the whole of India.

Does land revenue satisfy the main principles of taxation?

It does not satisfy the principle of equality, though it satisfies to some extent the other principles of certainty, convenience and economy.

A special study of the Punjab land tenures and revenue assessment is made. The tenures are a historical growth. Settlement in canal colonies and other parts led to their growth. In the Lyallpur canal colony a new basis of settlement has been introduced. It adjusts land revenue annually according to changes in the actual prices of crops. Thus the cultivator is protected from the fall in prices. Though it does not take into consideration the factor of costs, it is of great help to the agriculturist in this period of depression.

QUESTIONS ON CHAPTER X

1. What are the requisites of a land revenue settlement? How are the operations of settlement and assessment of land actually conducted?
2. Describe the main systems of land settlement established in British India. (C. U. 1922.)
3. What is the principle on which the assessment of land revenue in the Mahalwari Settlement is determined? Illustrate your answer by reference to conditions prevailing in the Punjab. (P. U. 1935)
4. State the salient features of the Permanent and Temporary Settlements in India? (C. U. 1931)
- Discuss their respective merits and demerits.
5. Compare the advantages and disadvantages of the Permanent Settlement with the Ryotwari System of land revenue. (C. U. 1919)
6. One of the objects of the Permanent Settlement, it was argued, was to supply capital to the land. Show how far it has served that purpose. Would you justify the continuance of the permanent settlement in the present economic and financial conditions of Bengal? Give reasons for your answer.
7. Write a short note on the land tenures and assessment of land revenue in the Punjab.
8. Write notes on :—
 1. Sabaranpur Rules
 2. Cadastral Record
 3. Application of the Ricardian theory of rent to land revenue in India.
 4. "Net assets".

9. Does land revenue in India conform to the main principles of taxation ?

10. Can rent of land be a reliable basis for fixing the assessment of land ?

11. What is the opinion of the Taxation Enquiry Committee on the standardization of land revenue in India ?

12. What is the new system of land revenue assessment introduced in the Lyallpur canal colony ? What are its advantages ? Can it be usefully extended to the whole of the province ?

CHAPTER XI

INDUSTRY

Preliminary Considerations

I. **The necessity and importance of industrialization.** Any one who talks of the economic progress of the country cannot help thinking of the development of its industries. It will, therefore, be useful to the student of Indian Economics to study in detail the benefits which are likely to accrue to India, when an era of industrial development is ushered in.

1. The main occupation of the people at present is agriculture, which is, unfortunately, not carried on scientific lines. The result is a low *per capita* income. The development of industries will relieve the pressure of population on agriculture by diverting its surplus from villages to towns and cities where industries are established. There is no apprehension of a shortage of food supply or any other adverse effect being felt on agriculture due to the decrease in the number of workers engaged therein. In the future the progress of agriculture is sure to improve the quality and the quantity of agricultural produce. The introduction of scientific implements and machines will also economise manpower. Moreover, the growing sub-division of the already existing small holdings will prove a menace to the Indian Agriculture and a withdrawal of these people, whose holdings have become very uneconomic, will be a blessing to others, who persist in the cultivation of land.

The investment of capital in land is sure to increase with the growth of industries. The Industrial Revolution in England was characterised by a great advance made in agriculture. The profits made by the capitalists, from the growth of industries and commercial concerns became also available for the benefit of agriculture. The same will happen in India. In this connection it is to be noted that the sentiment of the people and the social status attached to the possession of land are sure to attract the capitalist to agriculture.

With a general improvement in the economic position of the people, which is sure to be brought about by the development of industries, the Indian agriculturist will also feel a change for the better, may be, due to a rise in wages and prices or to the growth of new towns and cities. There

will also be a greater demand for the raw materials with every progressive step gained by the manufacturing industries in the country.

Thus industrial development will stimulate agriculture.

The Indian Industrial Commission of 1916-18, recommended a close co-operation between the Departments of Agriculture and Industries and stated :

"There are many ways in which the employment of power or hand driven machinery can assist the agriculturist, particularly in respect of irrigation, sugar-production and oil-milling. The demand for machinery for these processes would lead to the establishment of agricultural engineering works."

The development of agricultural engineering is emphasised by the Royal Agricultural Commission.

2. Closely allied with the advantages enumerated above is the one resulting from the diversification of occupations in the country and its effect on national character. The economic equilibrium of the country, which depends mostly on one industry *viz.*, agriculture, must needs be unstable. A failure of crops causes a wide-spread distress. Industrialisation will also build up the famine-resisting power of the people. It is a preventive check against famines.

Diversity of occupations is made possible by the establishment of several industries. It gives a free scope to the development of the talents of the people, who are otherwise steeped in conservatism and are intellectually backward. When we compare the people of other industrially advanced countries with those of India we find obvious differences in the character and the mental outlook of the people and are led to the conclusion that the vast majority of people in India are unable to develop their faculties for want of a stimulating environment.

3. The development of industries will increase the national dividend of the country and lead to an improvement in the standard of life of the people. Thus efficiency of the workers will increase, which in turn will result in a greater production of wealth. At the present time low income, lower standard of living and lesser productive capacity move in a vicious circle, which has got to be broken.

4. The manufacturing industries are generally subject to increasing returns. Profits and wages are sure to be greater under such conditions than in an agricultural economy. The material resources of the people are thus larger.

5. The growth of profits is accelerated. Industrial profits will lead to savings and, aided by the growth of banks and joint-stock companies the old and oft-repeated complaint of hoarding will be removed. Investments will increase and this, in turn, will again help the growth of industries and commercial concerns.

6. Economic self-sufficiency is a great asset to a country. A country ought to exploit its natural resources and develop these to the maximum extent, so that it may not have to depend largely on other countries. The industrial backwardness of India was revealed in its nakedness during the Great War. In the case of manufacture of war materials there is a great reason for a country being, as far as possible, independent.

7. The extension of the beneficent activities of the Government depends upon its income *i.e.*, the taxes paid to it by the people. Any measure which improves the taxable capacity of the people, automatically extends the scope of the beneficent work to be conducted by the Government. Industrialisation will increase the taxable capacity of the people and bring in its train a number of advantages.

8. Last, but not the least, the development of industries, by diversifying occupations and opening fresh avenues for employment, is the most effective remedy, in the long-run, for solving the problem of middle-class educated unemployment, which is a serious and a growing menace to the economic stability of the country.

Agriculture Versus Industry. A pointless controversy is sometimes raised over the question: should India develop her agriculture or industries? A backward agriculture is a drag on India's industrial development. Further, agriculture can also be organized on industrial lines as in the United States and Denmark. It has also been shown above that the effects of industrialization on agriculture will be wholly beneficial. It is not a question of agriculture versus industry, but of the two great occupations expanding side by side, with agriculture always necessarily taking the lead.* In India industrialization cannot eclipse the position of agriculture on account of its inherent importance and due to the dependence of about 70% of India's population on it.

II. INDUSTRIAL POLICY DURING THE BRITISH RULE

(1) **Earlier Period.** During the early period of the British rule in India, under the East India Company, Indian

*Calvert.

industries were flourishing. The Company dealt with the export of goods manufactured by Indian industries and consequently favoured their improvement. In the words of the Indian Industrial Commission of 1918 :

"At a time when the west of Europe, the birthplace of the modern industrial system, was inhabited by uncivilised tribes, India was famous for the wealth of her rulers and for the high artistic skill of her craftsmen. And even at a much later period, when the merchant adventurers from the West made their first appearance in India, the industrial development of this country was, at any rate, not inferior to that of the more advanced European nations". The metal industries, cotton, woollen and silk manufactures, jewels and embroideries, and other ornamental and artistic works won for its artisans the admiration of all people. The Indian trade was carried in Indian ships and the ship-building industry was in a prosperous condition. This glory of Indian industrial life was not destined to last long. The nineteenth century saw the decline of these artisan works and a collapse of many important industries. The Industrial Revolution in England brought about a tremendous increase in the supply of cheap machine-made goods, which found an easy entry in India. The ship-building industry declined with the growth of steam navigation and the construction of new kinds of vessels. The opening of the country by railways and roads (an era of development in the means of communication and transport was ushered in towards the second half of the nineteenth century) helped in the influx of foreign goods into the interior of the country, to the detriment of the indigenous industries. There was a decline in the Indian demand for local products, due to the fall of the various ruling families and with it their patronage over them. The new class of educated people as well as foreigners residing in the country preferred foreign manufactured goods to the indigenous ones. The disarming of the population and the inauguration of a better system of peaceful government brought about a decline in the demand for arms and weapons, manufactured locally. The textile industry (especially cotton spinning and weaving), the mineral and metallurgical industries, the dyeing and tanning industries were hit hard. By the end of the nineteenth century the decline of these industries was complete and hardly a few struggled to exist. The displacement of artisans from their ancient moorings increased ruralisation (as they had no other occupation except agriculture easily available) and brought about much suffering.

The policy of the East India Company was, as already stated, initially in favour of the development of those industries on which its export trade depended. It had subsequently to be changed as the British Parliament, to satisfy the vested interests in England, positively discouraged Indian manufactures in England and tried to stimulate the growth of British manufactured imports into India. The Government in India, on the other hand, followed the *laissez-faire* policy of the Home Government and did not make any move for helping the tottering industries. This policy, which was in effect a legacy of the old colonial policy, was initiated by the East India Company and retained by the Government even after the assumption of direct rule by the Crown in 1858. The result was that India became a producer of raw materials and a consumer of English manufactured goods. By this time some of the large scale industries also got established in different parts of India. The cotton and jute mill industries, engineering works, tea and coffee plantations were established on a large scale, though there was no definite policy of the Government towards industrial development. "It was thought inevitable that India should remain predominantly agricultural, whilst the Government wished to avoid both the active encouragement of industries that (like the cotton-mill industry) competed with powerful English interests and increased state expenditure. Hence, even at the end of the nineteenth century, all that the Government did to assist industry was to provide a certain amount of technical and industrial education, and to attempt to collect and disseminate commercial and industrial information."* Thus the Government activity in the direction of industrial development was extremely limited and utterly inadequate to meet the needs of the country. In addition to a meagre provision of technical and industrial education, a few industrial exhibitions were held and some of the provincial Governments issued monographs on some industries. In fact there was no progressive and definite policy for the development of industries on behalf of the Government. Whatever was done or achieved was due to the industrial efforts of a few provincial officials and it suffered from the lack of those advantages which a well-co-ordinated industrial policy would have bestowed upon the people and the country. Towards the end of the century a bolder policy was introduced in some of the provinces.

In Madras Sir (then Mr.) Alfred Chatterton took active steps in pursuit of a progressive industrial policy. He obtained the approval of the Madras Government not only

*Vera Anstey.

for improving technical education, surveying industrial possibilities or assisting private enterprise but for actually starting pioneer industries with Government resources. The aluminium industry was experimented upon successfully. Mr. Chatterton was encouraged in reorganising and developing technical trades and industries and establishing a better system of technical training. Handloom weaving, well boring, oil engine and centrifugal pumps for lift-irrigation, chrome tanning and aluminium industry received special attention. A very healthy atmosphere, for such provincial activities, was created by the policy of Lord Curzon's Government who in 1905 created a separate department of Industries and Commerce, to follow a co-ordinated policy of industrial development in India. This policy was, for the time being, sanctioned by the Secretary of State on the condition that pioneer industries should be run only temporarily by the Government and should be entrusted to private enterprise after they had passed the experimental stage and as soon as their success on a commercial scale was assured. Subsequent to the inauguration of this progressive policy a separate provincial department of Industries was established in Madras in 1906 and Mr. Chatterton was appointed "Director of Industrial and Technical Enquiries". Such an extension of Government activity and success in preliminary industrial experiments provoked the opposition of the European commercial community in India. When the proposal for the extension of their work, was submitted by the Madras Government, Lord Morley, the then Secretary of State for India, turned it down: and also rejected the proposal for the establishment of the provincial Department of Industries. He denounced any direct measures on the part of Government for the establishment of pioneer or experimental industries, even though they were subsequently transferred to private hands. "The policy which he was prepared to sanction, was that state funds might be expended upon familiarising the people with such improvements in the method of production, as modern science and the practice of European countries could suggest. Further than this the state should not go and it must be left to private enterprise to demonstrate that these improvements could be adopted with commercial advantage."

This announcement of the policy discouraged the industrial enterprise of the Madras Government. The separate Department of Industries was abolished, the chrome tannery was sold, the experimental hand ware factories were discontinued and Mr. Chatterton was placed under the control of the Education Department. Only the pumping and boring operations were continued. In the United Pro-

vinces, attempts of a similar nature, which had been made, were adversely affected by Lord Morley's despatch of 1910.

Lord Crew, the successor of Lord Morley, pointed out that the Madras Government "appear to have placed too limited a construction upon the orders given in my predecessor's despatch of 29th July, 1910." In spite of this, "the Government of India seemed to be in doubt as to how far they would be justified in sanctioning proposals for demonstration plants, financial assistance and other forms of due aid to industries."*

The Government could not also take any effective steps in absence of the necessary equipment and organization. After 1910 the appointments of Directors of Industries for provinces were sanctioned, though without any special departments. Their work was limited to the collection and dissemination of information, carrying on researches and experiments in the field of industry, supervising industrial training and giving of advice to the Government in industrial matters. Nevertheless, the decision of Lord Morley's Government had provoked agitation in favour of direct encouragement of the State in industrial matters. It was stated that Government of India could have created an organization for an effective industrial policy. It should have helped immensely in this direction by taking advantage of the sentiments of the people which were at that time aroused in favour of national industries (Swadeshi Movement).

Though Lord Morley's dictum suppressed the activities of the Government, a more liberal policy was followed in response to the public demand. A separate department of industries was established in Madras in 1924, though in the Central Provinces, Bengal and the United Provinces there were only Directors of Industries. "Madras specialised in leather and dyeing; Bengal paid special attention to silk; the revival of cottage industries—especially weaving, tanning, and shoe-making—was emphasised in the Central Provinces; and weaving, the sugar and engineering industries were encouraged in the United Provinces." Later on, the Government took some more effective steps. These were:—

(1) A change in the rules regarding purchase of government stores. This subject is dealt with more fully at a later stage.

(2) Improvement in the laws pertaining to patents and designs.

(3) The grant of assistance to big industries like iron and steel.

* Report of the Industrial Commission.

(4) Introduction of co-operative principle in the field of industries, and

(5) Extension of facilities for industrial and technical education and granting of state scholarships for technical education abroad. It was at this stage that the War broke out in 1914.

III. 1914 AND AFTER

The great war, which was obviously a calamity to the whole world, put India, on the other hand, in a lucky position, so far as the development of her industries was concerned. The supplies, which she used to get from other countries, were cut off and her unenviable economic helplessness was brought into relief. At the same time, she became a base of supplies for the eastern theatres of war. The demands for Indian goods increased enormously on this account as well as on the part of the allies and within the country. There was, thus, considerable opportunity for her to develop her industries by taking advantage of this extraordinary position. There were, however, certain difficulties which did not allow her to take the maximum benefit and thus Japan and the United States of America gained a pioneer footing in the Indian markets. India lacked machinery and equipment for the expanding industry and large-scale production. These were not easily available. There was a lack of technical experts and skilled labour to meet the growing demand. The inadequacy and expensiveness of internal and external transport arrangement and the shortage of coal and coking plant were additional handicaps. The lack of industrial resources in the country was felt as a staggering reality by the Government and it acted as an eye-opener to it for military reasons, if not for any others. In the despatch of 26th November 1915 Lord Hardinge's Government stated, "It is becoming increasingly clear that a definite and self-conscious policy of improving the industrial capabilities of India will have to be pursued after the War, unless she is to become more and more a dumping ground for the manufactures of foreign nations who will be competing the more keenly for markets, the more it becomes apparent that the political future of the larger nations depends upon their economic position."

It was keenly realized by the Government that services rendered by India in the Great War should have been immensely great, if it had been fully equipped as an industrial country. In the words of Montague-Chelmsford Report, "Now-a-days, the products of an industrially developed community coincide so nearly in kind, though not in

quantity, with the catalogue of munitions of war that the development of India's natural resources becomes a matter of almost military necessity." The change in the angle of vision of the Government led to the appointment of Industrial Commission in 1916.

The Commission was asked to examine the whole problem of industrial development in India and to recommend a permanent policy of Government in this behalf. Since the investigation by the Commission would take some time, it was considered desirable to enforce some emergency measures for industrial stimulation to meet the needs of the War. So the Indian Munitions Board was created in 1917 "to control and develop Indian resources, with special reference to the needs created by the War, to limit and co-ordinate demands for articles not manufactured and produced in India and to apply the manufacturing resources of India to war purposes with the special object of reducing demands on shipping". Though the Board was appointed primarily for stimulating the production of war materials, it gave considerable assistance to the local industries in a number of ways. The Government purchases of materials were made in India and even the indents of the Home Government were placed in India. Industrial manufacturers were afforded assistance in the import of machinery or in obtaining the services of experts. To fresh enterprisers necessary information was also furnished. Indian goods, even though of comparatively inferior quality, received adequate protection. In the words of the Government of India Report 1917-1918,* the War had brought about "an atmosphere of economic protection in which the industries of India, both nascent and established, have flourished to an unprecedented degree". Industries pertaining to cotton, jute, iron and steel, leather, engineering, chemicals, mineral acids, oils, paper, glass, cement, cutlary, fertilizers, paints and varnishes, surgical instruments etc. received a great fillip.

The Industrial Commission submitted its report in 1918. It discussed the dependence of India on other countries for iron, steel goods and machinery, shyness of industrial capital, inefficiency of Indian labour, want of industrial experts and deficiencies in cheap power and other materials, necessary for industrial development. Its proposals involved the important principle that "in future the Government must play an active part in the industrial development of the country, with the aim of making India more self-contained in respect of men and materials", and that, "it is impossible

* Page 18.

for Government to undertake that part unless provided with adequate administrative equipment and forearmed with reliable scientific and technical advice.* Realising that India was rich in raw materials and industrial potentialities but poor in manufacturing accomplishment, it made the following recommendations:—

1. Creation of the imperial and provincial departments of Industries and of an Imperial Industrial Service. An Imperial Department of Stores, with branches in each province, was also proposed for controlling the Government orders and contracts. The provincial departments of industries were proposed to be controlled by the Director of Industries, who was to be aided by the Provincial Board of Industries. Much of the administrative work was entrusted to these Provincial Departments.

2. Reorganization of the scientific staff of the Industries Departments.

3. Improvement of technical education and training.

4. Improvement in the conditions of work for labourers.

5. Technical and financial aid to industries. Pioneering and demonstration industries with their functions and limitations have been discussed.

6. Special aid to small and cottage industries and the introduction of industrial co-operation.

7. For cottage industries peripatetic demonstration of improved processes and machinery have been emphasised.

8. Organisation of commercial and industrial intelligence and the creation of a Special Department with adequate staff for this purpose. The recent appointment of the Indian Trade Commissioner in India is approved. His functions are specified and the desirability of establishing similar agencies in other countries is also emphasised.

9. Improvement in transport facilities.

10. Close alliance and working of the Departments of Industries, Agriculture and Co-operation.

11. Improvement of technical education and training.

12. Improvement in the conditions of work for labourers.

The recommendations were accepted in principle by the Government of India but little could be achieved owing to the distraction caused by the War. The question of

*Report of the Indian Industrial Commission.

tariffs was excluded from the purview of the Commission but the Indian Fiscal Commission was appointed for this purpose in 1921. The Indian Munitions Board was merged in the Imperial Department of Industry and Commerce. The Departments of Industries were established in consonance with those recommendations of the Industrial Commission and have, since then, been functioning more actively. The work of those departments covers a wide field of activity.

Activities of the Department of Industries. Among other functions the important ones are :

1. Provision of financial and technical aid to existing industries. Each province has got its own laws for the purpose of granting financial aid to industries. In the Punjab, the Punjab Industrial Loans Act was repealed in 1935 and in its place the Punjab State Aid to Industries Act was brought into operation with effect from 7th March, 1936. The new Act has, according to the recent Government announcement, "considerably widened the scope of financial assistance on which the industrialists of the Province can draw for the development of the existing industries or starting of new industrial enterprises." It provides for assistance in the form of :

- (a) Grant of loans.
 - (b) Grant of subsidies.
 - (c) Supply of machinery on hire-purchase system.
 - (d) Guarantee of minimum return on the capital invested.
2. Conduct of research work for both existing and potential industries.
 3. The establishment of new industries.
 4. Technical and industrial training.
 5. Extension of markets and improvements in marketing organization.
 6. Co-ordination and dissemination of industrial knowledge.
 7. Evolution and introduction of modern appliances in small-scale industries.
 8. Inspection of factories.

The Great War was followed in India by an industrial boom, which was not destined to last long. The compressed springs of industrial and commercial activity were released. There was a heavy plantation of joint-stock companies but, unfortunately, much of it was a mushroom growth. It was a period of prosperity for several manufacturing and

exporting industries, such as cotton, jute, cement, steel and iron, manganese, oil-seeds, hides and skins. About the middle of 1920, there was a turn in the tide and a period of depression set in. The changes in exchange aggravated the trouble.

It was early in 1923 that the report of the Fiscal Commission, recommending grant of Discriminating Protection, was accepted by the Government of India and the Tariff Board began to function soon after. The Government of India announced a definite policy in favour of protecting Indian Industries. The world trade depression, which began in 1929, did, however, adversely affect Indian industries.

IV. STATE PURCHASE OF STORES POLICY

Closely allied with the industrial policy of the Government of India is its policy with respect to the purchase of its stores. This has been the subject of much public criticism. For a long time these stores, so far as they were, imported from outside, were purchased mostly from British manufacturers. The Indian opinion viewed this policy with great resentment and pressed upon the Government the necessity for the adoption of the liberal policy in favour of Indian merchants and Industrialists. Arguments were, however, advanced in favour of the purchases in England on the grounds of better quality, lower price and convenience. These arguments have been losing their force since the growth of manufactures in India. This subject was commented upon by the Indian Industrial Commission. It observed that all indents for Government and Railway stores should be met, as far as practicable, in India. It was suggested that an expert agency should be created for giving information regarding sources of supply, prices etc. In 1919-20 the Stores Purchase Committee made definite recommendations in form of an organization to be set up for this purpose. The Indian Stores Department, under the direction of the Chief Controller of Stores, was created. The Indian High Commissioner in London is now responsible for the purchase of stores on behalf of the Government of India. The rules regarding these purchases have now been modified and a fair treatment is meted out to Indian Industrialists and Traders. According to the rules issued in 1924 there is an "assertion of a more definite preference for stores produced or manufactured wholly or partly, in India, an important extension of the power to purchase imported stores and the introduction of a central purchasing agency in India, namely, "The Indian Stores Department".

There are, however, certain conflicting considerations which have to be reconciled in forming a policy in this behalf. Should stores be purchased in the cheapest market, outside or inside the country, or should preference be given to Indian manufactured goods over foreign goods and should British manufacturers receive preference over foreign manufacturers? In the latter two cases the Indian tax-payer will have to make up the loss involved in not purchasing in the cheapest markets. The balance of considerations does, however, weigh in favour of Indian manufactured goods, provided the quality is not inferior and the prices are not unfavourable.

"The current rules to regulate stores' purchase prescribe that preference in making purchases shall be given in the following order :—

First, to articles which are produced in India in the form of raw materials or are manufactured in India from raw materials produced in India, provided that the quality is sufficiently good for the purpose.

Second, to articles wholly or partially manufactured in India from imported materials, provided that the quality is sufficiently good for the purpose.

Third, to articles of foreign manufacture held in stock in India provided that they are of suitable type and requisite quality.

Fourth, to articles manufactured abroad which need to be specially imported."¹

The Indian Stores Department² is a very useful organization which assists the manufactures in India in improving the quality of their products by offering technical advice and suggestions. An important recent development of the department, under its control, is the institution of an Industrial Intelligence and Research Bureau, the principal functions of which include :

1. "The collection and dissemination of industrial intelligence ;
2. Collaboration with provincial Directors of Industries and industrialists in all matters relating to industrial research ;

1. Indian year book 1937-38, p. 779.

2. "The total value of orders placed by the Department during the year 1934-35, the latest period for which figures are yet available, was Rs. 4,76,36,251 as compared with Rs. 3,59,94,135 during 1933-34. The increase amounts to Rs.1,16,42,116 or 32.3 per cent. which is most satisfactory, considering that the emergence from the great depression was slow and hesitant and that expenditure on large capital works continued to be restricted"—Indian Year Book 1937-38, p. 779.

3. The publication at intervals of bulletins relating to industrial research and other matters connected with industrial development ;

4. Assistance to industrialists in India by giving advice and making suggestions as to the directions in which research should be undertaken ;

5. To collaborate with the various organizations of the Central and Provincial Governments with a view to ensuring that specifications prepared or issued by them provide as far as possible for industrial standardisation ;

6. to assist in the organization of industrial exhibitions in India.”*

Purchase of Railway Stores. In 1929-30 the total value of Railway materials purchased was Rs. 30·06 crores. The purchase of Railway requirements in India would give a stimulus to Indian industries. According to the convention of 1934 Government is committed to the purchase of stores for State Railways through the Stores Purchase Department of the Government. Out of a total material worth Rs. 11·04 crores purchased in 1932-33, the value of imported material was Rs. 4·21 crores.

V. INDUSTRIAL FINANCE

Industrial finance in India is supplied from two sources : (1) internal and (2) external.

(i) **Indigenous Capital.** The internal capital resources of the country are not adequate for the industrial needs. The Indian capital is shy, Indians are given to hoarding and India is a sink of precious metals (as evidenced by the net imports of gold and silver between 1913 and 1924, amounting to Rs. 482 crores) are more or less stale arguments used in justifying the industrial deficiency of the country. The supply of indigenous capital is increasing gradually as is shown by figures relating to the growth of paid-up capital of Indian Joint Stock Companies and increase in the contributions made to the loans issued by the Central and the Provincial Governments.

Apart from the fact that the general level of well-being in the country is low and capital needed for big industrial enterprises may not be easily forthcoming, there are several difficulties which the investor in India has got to face. The Indian Industrial Commission remarked, “The difficulty in raising capital for industries is mainly the measure, even in India, not of the insufficiency or inaccessibility of money, but of the opinion which its possessors hold of the

*Indian Year Book 1937-38, p. 779.

industrial propositions put before them." The measures which have been introduced by the Government for supplying commercial and industrial information have already been indicated. The organisation for the mobilisation of the capital resources of the country need extension and improvement.

The modern banking organisation does not serve the rural area, where the only institutions of this type are the Post Office Savings Banks and the Co-operative Societies which cannot effectively get the savings to a considerable extent and are unsuitable to serve the purpose of industrial finance. The village money-lender, who is the main supplier of credit, does not like to invest his capital in industries, as his profits in other fields of investment are large enough. Here and there a few industries (like cotton ginning presses, flour and rice mills) may have been started with local capital, but generally the savings, wherever they are possible, are not used profitably in industrial undertakings. Jewellery or even idle hoards are prepared.

The Reserve Bank of India is considering measures for bringing about a connection between rural credit and the organized banking system but very unlikely it is to be of much benefit for industrial financing.

In towns and cities the credit-supplying agencies are well-organised. The growth of modern joint-stock banking has effectively mobilised the savings of the people but it does not supply long-term loans to industries. Even the Imperial Bank of India is unable to do so. In other countries of the world Industrial banks have been established but such institutions are absent in this country. The Indian Industrial Commission gave much consideration to the subject. It recommended the establishment of industrial banks to meet the needs of small and middle class industrialists but suggested the appointment of an expert committee to offer its advice regarding the additional banking facilities whether for the initial or for the current finance of industries and the government control or assistance needed in this behalf. Feeling that the establishment of industrial banking would take some time, the commission submitted a scheme "for the provision of current finance for middle class industrialists, by which the banks would lend money, subject to a guarantee by the Government after an examination by the Director of Industries and his expert staff of the financial standing of the applicant and the prospects of his business." It also suggested that in a few cases of "National Safety" undertakings of a large size, requiring Government assistance, Government should provide,

subject to suitable precautions, direct financial aid in the form of guarantee of dividend, loans of money, undertakings to purchase capital or contributions to share capital. Finally, measures of financial help to small and cottage industries by local Governments were also recommended.

The Central Banking Enquiry Committee suggested the formation of Provincial Industrial Corporations and an All India Industrial Corporation. It, however, observed that "the advisability of giving assistance to any particular industrial concern should depend on the extent to which the enterprise will add to the productive power of the province and provide employment for its people."

(ii) *Foreign Capital.* Having dealt with the limitations of indigenous supply of capital, it is necessary to transfer our attention to the supply of foreign capital in the country which is not inconsiderable as compared to the indigenous capital. It is, however, difficult to estimate accurately the total amount of such capital invested in different manufacturing, mining, engineering and planting industries as well as in steam navigation and railway companies or in banking or insurance concerns. The amount of paid-up capital¹ of joint-stock companies in British India incorporated outside the country was £ 830,592,232 in 1932-33 as compared with Rs. 2,86,43,30,165 worth paid-up capital of such companies registered in India. These figures give only general indications of the comparatively great volume of foreign capital as compared to local² one. The amount³ of foreign capital in India is invested in 881 companies which gives a capital of Rs. 130 lakhs for each company. The total Indian investment of Rs. 286 crores is spread over 7000 companies which gives a capital of Rs. 4 lakhs for each company. The average foreign company is 34 times bigger than the average Indian company. Some of the foreign companies have Indian share capital while some Indian companies may have foreign share-holders. There is also a large number of private firms belonging to foreigners, carrying on large industrial and commercial enterprises. The Government of India has also several times in the past depended upon capital raised in England especially for railways and irrigation purposes. The amount of sterling loans, raised in England, was £ 385.02 millions⁴ on 31st March 1935 and this is exclusively a foreign contribution.

1. Statistical Abstract for British India 1932-1933.

2. The rupee loans raised by the Government of India advanced from Rs. 145.6 crores on 31st March 1914 to Rs. 438.3 crores on 31st March 1935; exclusive of the Treasury bills and postal cash certificates—Jathar and Beri Vol. I. p. 472.

3. India Before the Crisis—Brij Narain.

4. Jathar and Beri Indian Economics Vol. I, P. 471.

The investment of foreign capital should not raise an undue alarm in the minds of the people. Other countries of the world which have shown considerable economic progress have benefitted by the use of foreign capital.

“ London is the largest source of capital for British colonies and foreign countries, and England had on an average, before the War, about Rs. 300 crores to lend every year. Capital has become cosmopolitan and is comparatively cheap in western countries. The railways in the colonies and in countries like China and Turkey, have been constructed with the help of English, American and French capital. Exported capital goes out in the shape of manufactured goods such as steel rails, rolling stock and locomotives ; and the lending nations compete with one another in supplying them as it encourages their industries.”* It is no wonder therefore that India has depended or will depend for some time to come, on foreign capital.

The case for and against the use of foreign capital by a country. Foreign capital confers certain advantages on a country but brings in its train some disadvantages also. The process of industrialization is quickened with the help of foreign capital. The capital invested in industries gives employment to the indigenous labour, makes the country richer and thus raises the general standard of living. The great public utility services and several manufacturing and commercial concerns in India are the creation of foreign capital. It may be said that the profits go out of the country and they are being carried out of all proportion to the corresponding benefits conferred on the people. It is, however, open to the country to delay and postpone its industrial development with such possible restrictions that it can improve on the import of foreign capital, till such a time that it is able to amass its own capital or speed it up with foreign capital and obtain the maximum advantage out of it, by getting its labour power trained and the country sufficiently equipped with modern industrial knowledge and organization.

Foreign capital, when used in the initial stages of the industrial development of a country does the work of pioneering for indigenous enterprises and bears the initial cost of experimentation and development. It becomes easier for local enterprise to follow the path which has been chalked out with the help of foreign capital.

As against these advantages the use of foreign capital has been decried on certain plausible grounds. That profits go out of the country has been admitted even by the

* Kale—Indian Economics.

best advocates of foreign capital. The exploitation of the natural resources of a country with the help of foreign capital for the benefit of foreigners is considered by some people a greater evil than the postponement of the process of industrialisation. The industries which manufacture articles of national defence or those goods which are used as raw materials in other industries should in particular be guarded against such exploitation. Foreign capitalist may not at all take the people of the country into confidence and afford them facilities for training. If the advantages of getting its labour trained by a country is not obtained in such industries, where foreign capital is used, the country is denied the most important benefit which would otherwise accrue to it. This complaint against the foreign capitalist in India has been a common one. Foreign capital creates vested interests, which exhibit opposition to measures of political reform, by putting forth arguments that their investments may not remain secure. From the political and economic point of view foreign capital may thus prove harmful. Commercial safeguards were introduced in the Government of India Act of 1935 in order to safeguard and secure the existing and the future interests of foreign capital in India.

Various forms of foreign capital in India and their implications. If by foreign capital we mean only money lent by foreigners to India, for which a reasonable interest has to be paid, nobody will have anything to say against it. "The great mistake to be guarded against is that because certain capital used in India is foreign, it must, therefore do harm to the country. It has, of course, to be considered that we ought not to pay too high a price for it."*

But foreign capital in India has also taken the form of investments by foreigners, who not only earn their legitimate rate of interest but partake of the profits of the industries, where their investments are made and not infrequently create problems of foreign control and management of such industries. It is, therefore, the foreign capitalist and not foreign capital that is to be guarded against. The External Capital Committee of 1924 appointed by the Government of India to consider the question of foreign capital in India came to the conclusion that the inflow of external capital in India is not only unobjectionable in itself, but that it is a valuable factor in assisting the economic development of the country and in increasing its wealth and employment, though it emphasises upon the greater advantages that will accrue from the supply of capital from the internal sources.

*Industrial Conference, 1906.

The committee divides foreign capital into three classes.

1. Investments in which the foreign capitalist is merely entitled to a stipulated rate of interest and only acquires control when there is a default, as in the case of State and municipal loans, bonds and debentures of private companies and bank loans.

2. Investments in which the external investor enters into competitive business on equal terms with Indian enterprise, as in the case of cotton and other textile mills, mercantile houses *etc.*

3. Investments in which the external capitalist acquires special privileges or concessions of land which give him exclusive possession or exclusive rights of exploitation of particular portions of the natural resources of India.

The committee does not consider any measures of control necessary for class (1) but states that in the case of Government and quasi-Government loans, the rate of interest should not be the sole consideration in placing such loans, and that, other things being equal, preference should be granted to the Indian investor.

As regards class (2), the committee considers the restrictions generally proposed but does not favour their imposition on account of their being impracticable or disproportionately injurious to the Indian investor.

They further object to these because they will entail elaborate system of trade licensing and Government control and will probably lead to evasion by the large capitalist. Their suggestions are given below :—

(a) New foreign companies should be registered in India with rupee capital only. It will thus tend to encourage Indian investment. This may, however, lead to the formation of private instead of joint-stock companies though it can be asserted with equal force that large-scale enterprises cannot easily be built up with the help of private firms.

(b) A proportion of the share capital of foreign companies should be definitely reserved for Indian investors.

Restrictions will thus have to be imposed on the free transfer of shares from Indians to non-Indians, if they are initially held by the former. The effect of this restriction would be to divert the amount of capital in the industry concerned and to allow a gain to the capitalist by lessening the competition, at the cost of the consumer. A restricted market

for the share-holder created by such reservations would not be in his interest, since it would lessen the value of his shares.

(c) A certain percentage of the directors should be Indian and Indian control should be amply ensured.

This restriction, it is said, savours of racial discrimination.

(d) That all such companies should afford facilities for the training of Indian apprentices and that penal taxation be imposed on those who do not comply with this regulation.

This restriction is a necessary one in the interest of the country, which will be exploited by the foreign capitalist and ought to gain in some manner.

In the case of the third class investments where definite concessions are granted, the committee agree that restrictions might be imposed. They approve of the measures taken by the Steel Protection Act of 1924 in the case of such concerns where the foreign capitalists acquire a definite concession, such as a bounty. In the case of mining and similar concessions, the foreign capital should be allowed to come in where internal capital is not forthcoming on reasonable terms. The restrictions and safeguards are to be determined in such cases by the expert department of the Government concerned. This opinion is in general agreement with the recommendation of the Indian Fiscal Commission made in this behalf and which runs as follows :—

“That no obstacles be raised to the free inflow of foreign capital, but that Government monopolies or concessions be granted only to companies incorporated and registered in India with rupee capital, such companies to have a reasonable proportion of Indian directors, and to afford facilities for training Indian apprentices.”

Foreign capital and the Government of India Act, 1935. The Government of India Act, 1935 does not permit any restrictions on the inflow of foreign capital. This means that foreign concerns can establish themselves in India and benefit by protective duties given to certain industries. Further, no conditions of eligibility for bounty or direct State help are to be imposed on companies established prior to the passing of the Government of India Act, 1935. In the case of those foreign companies that are established after 1935 the grant of bounty should be subject to the following conditions :—

(i) That the company should be incorporated by or under Indian law :

(ii) That not exceeding one-half of the total number of directors should be Indians :

(iii) That the company shall give such reasonable facilities for the training of Indians as the Act may prescribe.

Conclusion. Foreign capital in India was necessary in view of India's industrial inertia. But it proved to be a necessary evil as is evident from the commercial safeguards introduced in the Government of India Act of 1935. Henceforth India must rely upon her own capital for her industrial development. At least this must be the aim if complete self-sufficiency in the matter of capital supply is not possible. Foreign capital should be introduced as a servant and not as a master. The political implications of an unrestricted flow of foreign capital in the country cannot be ignored.

Attempts should be made to develop India's capital resources. This would require an extension and an organization of our banking facilities. The economic development of the country will increase the supply of capital available in the country as the accumulation of capital is a snow ball process.

SUMMARY

Industrialisation is highly desirable in India for removing congestion in Agriculture and for diversifying the occupations of the people. The reaction of industrialisation on Agriculture will be beneficial to the latter. Investments in land will increase and agricultural improvements will take place. The famine-resisting power of the people will increase. Industrialisation will give a freer scope to the development of the talents of the people. The national dividend of the country will increase. Profits and capital will increase. Taxable capacity of the people will improve and hence make it possible for the Government to extend its beneficial activities. It is the only solution for middle-class unemployment.

The controversy, agriculture versus industry, is meaningless. The two are supplementary.

Indian industries were flourishing during the early period of British rule in India. The Industrial Revolution brought about a great change. The influx of foreign goods brought about a collapse of indigenous goods and the decline of the Indian shipping industry. There was an absence of encouragement in favour of local industries in India while Indian manufactures were discouraged in England. Soon after large-scale industries got established in different parts of India. In the nineteenth century the Government assistance to industries was extremely limited in scope. A bolder policy was advocated. In 1905 a separate department of industries and commerce was created. Lord Morley's policy was discouraging. His successors sanctioned a more liberal policy and more effective steps were taken in granting

assistance to industries. The Great War gave stimulus to Indian Industries. The Munitions Board was created in 1917 especially to look after the production of war materials. The Industrial Commission was appointed in 1916. It submitted a number of recommendations for grant of help to big and small industries. The Imperial and Provincial Departments of Industries were established in each province with a fairly wide programme of work. The Indian Fiscal Commission was appointed in 1921. It recommended grant of discriminating protection.

The State purchase of stores policy was the subject of public criticism for a long period of time as orders were placed formerly with British manufacturers mostly. The rules in this behalf have now undergone changes in favour of Indian industries and trades. The Indian Stores Department is a very useful organization. Industrial intelligence and Research Bureau has been established along with it. The subject of industrial finance is an important problem. The internal resources being limited, the financing of industries was taken up by outside agencies. The establishment of industrial banks is a great necessity. The opinion of the Central Banking Enquiry Committee was in favour of provincial industrial corporations. The investment of foreign capital has raised a controversy regarding its services and disadvantages. The foreign capital is not bad but there should exist safeguards against exploitation of the foreign capitalist. One very important condition to be imposed on him should be the training of indigenous labour. The country should not pay a price out of proportion to the benefits enjoyed. The External Capital Committee of 1923 admits the advantages of foreign capital in India but suggests the imposition of certain restrictions.

According to the Government of India Act of 1935 foreign capital is ordinarily to be permitted in the country without restrictions. It is only when the foreign capitalist receives definite concession that it needs trained Indians or have Indian directors.

QUESTIONS ON CHAPTER XI

1. Discuss the importance of industrial development to India.
2. How far does India possess the natural advantages and equipment required for a great industrial development ?
 "Nature has destined India to be an agricultural and not a manufacturing country." Comment on this proposition. (P. U. 1920)
3. What in your opinion are the chief hindrances to industrialism in our country ? (C. U. 1920)
4. Examine the policy of the Government of India with respect to Industries in the nineteenth and the twentieth centuries.
5. What were the recommendations of the Indian Commission ? How far have these been carried out upto now ?
6. Examine the policy of the Government with respect to stores' purchases in India.

7. Examine the defects of the organization of Industrial capital in India. (P. U. 1922).
8. What are the different forms in which foreign capital enters India ? (C. U. 1926)
9. Write a short critical note on the economic effects of the employment of foreign capital in India. (C. U. 1917)
10. Do you advocate imposition of restrictions on foreign capital in India? If so, in what manner ?
11. What is the position of the foreign capitalist under the Government of India Act of 1935 ?

CHAPTER XII

INDUSTRY: INDUSTRIAL STRUCTURE

Large Scale and Small Scale

Large scale industries in India are making steady progress as is revealed by the following figures relating to joint stock companies registered in India.

KINDS OF COMPANY	No.	1914-15	No.	1931-32
		PAID-UP CAPITAL Rs. (LAKHS)		PAID-UP CAPITAL Rs. (LAKHS)
1. Railways and Tramways	44	8,30	46	15,04
2. Tea	208	4,31	475	12,74
3. Planting companies	29	41	89	1,97
4. Coal mining	140	6,09	214	8,97
5. Gold mining	8	33	3	4
6. Other mining and Quarrying	57	5,76	89	29,23
7. Cotton Mills	205	16,70	288	31,11
8. Jute Mills	34	7,61	69	18,98
9. Mills for wool, silk, hemp, etc.	13	1,22	20	2,45
10. Cotton ginning, pressing, baling etc.	...	...	106	2,50
11. Jute presses	139	2,70	29	1,75
12. Flour mills	30	80	24	1,23
13. Estate, Land and Building	32	2,17	139	10,03
14. Sugar (including jaggery)	22	80	46	2,00

A very interesting classification of Industries in India has been made by Professor Vakil and his collaborators in their book, Growth of Trade and Industries in India. This classification is, however, overlapping in certain respects. First, they divide industries into those which supply the needs of the home market and those which manufacture goods for export.

It is not necessarily a good ideal to aim at the production of goods meant for the home market only. The industrially advanced countries of the world like the United King-

dom, U. S. A. and Japan have developed export industries on a large scale. In India jute and tea are mainly export industries. China was a market for Indian cotton yarn in earlier years. Iron industry depends upon export and it can be extended. So should it be possible for cotton piece goods.

The second classification is made from the point of view of ownership and finance, *viz.*, those financed and owned by foreigners and those which are financed and owned by Indians.

The subjects of Industrial finance and foreign capital have been dealt with in the previous chapter. The industries owned and financed by foreigners have not conferred any special benefits on India except so far as the employment of local labour is concerned. They have remained exclusive and "in consequence, not only have the profits in these industries gone to foreigners, but the variable experience, enterprise, knowledge of technique etc. have also been lost to us." Jute, tea and coal industries are the examples of this type.

Thirdly, a division has been made of industries into those managed by Indians and those managed by foreigners. There are a few ones owned by Indians but managed by foreigners, for example the steel industry.

The justification for the existence of this arrangement lies in the fact that qualified and suitable Indians are not available to take up the responsible work of management, especially in those fields where skilled work is required. This should not, however, be a permanent feature of these industries. The Government should enforce the rule of training Indians particularly in those industries which enjoy protection.

The fourth division is made into those owned by the State and those owned by the people privately. The principle of ownership of industries is dependant upon the form of Government in a country. In a State where capitalism exists, the State ownership of industries does not predominate. It is rather the exception than the rule. In the case of certain public utility services, however, the Government ownership is generally the rule. In India Railways are at present, largely and will, in course of time, be wholly under the ownership of the State. The Government has also partnership interest in a few industries.

Lastly, the industries are divided into those which receive protection or other forms of State assistance and those which do not receive such assistance. While taking up the detailed survey of each industry, the measure of protection

enjoyed by it and the manner in which it has responded to it, will be mentioned.

THE COTTON INDUSTRY

India has been considered as the home of cotton trade from the ancient times. Cotton was known as white wool to the ancients. The cotton products were all hand-made and some of its best specimens, (Dacca muslins) won the admiration of the West. The trade in Indian handloom products "grew so large that it excited alarm in England, and it was killed by a series of enactments, commencing in 1701 prohibiting the use or sale of Indian calicoes in England." The industrial revolution in England and other causes, such as absence of measures in India for protecting the decaying industries, converted India from an exporter of manufactures into an importer of the same. The large-scale mill industry enterprise began in 1818, when the first cotton mill was erected in Calcutta. The first mill in Bombay was established in 1854. In the beginning the industry got concentrated in the Bombay islands but from 1877 it spread over to other centres, *viz.*, Ahmedabad, Sholapur, Nagpur etc. The industry began to spread to Indian states subsequently to avoid the British Indian factory laws. There are now cotton mills established in Northern India also. The demand for Indian mill-made cotton increased with the extension of the Swadeshi movement and consequently brought about the growth and extension of the industry. The early localisation of the industry in Bombay was due to the availability of capital and credit facilities, cheap and quick transport and the demand of China for Indian yarn. The tendency towards decentralisation has been caused by the rapid growth of means of communication and transport and mills have got established at centres which are nearer to the sources of raw material and labour and have a better access to markets.

The decline in the Chinese demand for yarn from the beginning of the twentieth century has also contributed to bring down Bombay² from the place of comparative advantage and eminence which it enjoyed.

Even now the spinning of yarn is to a large extent concentrated in Bombay. The following is the percentage production of yarn in different provinces:—

1. Indian Year Book, p. 695.
2. "The mills in the Bombay island supplied more than ninety per cent of the total exports of which China absorbed ninety per cent."—Jathar and Beri—Indian Economics, p. 29.

Bombay	52	per cent.
United Provinces	10	"
Madras	11	"
Bengal	4	"
Central Provinces	4.3	"

The remaining provinces produce very little quantities. The fact, however, that the number of mills working in Bombay and the average number of persons employed there decreased from 78 and 148,254 in 1926 to 55 and 95,637 respectively in 1934, establishes that it has not the same position now as a textile industry centre as it had before.

In the earlier period Indian mills could not produce finer counts of cotton but in recent years a change for the better has been steadily taking place. Cotton produced in India is generally of short staple and in spite of the efforts for the improvement of cotton cultivation, it cannot produce a sufficient quantity of long staple cotton for feeding the Indian mills, which have to depend on the import of such variety. This factor, combined with the difficulties of installing new machinery, stands in the way of a rapid improvement in the production of finer counts. Nevertheless, the mill industry has been improving both from the point of view of quantity and quality, as is shown by the figures given below.

The export trade in yarn which the country developed in the last century received a set-back from 1904-5. This was due to the loss of the Chinese market on the one hand and the rise of the weaving industry in India on the other. There were disturbances in the exchange rate with China and she began to develop her own spinning industry. Shipping difficulties were also caused during the Great War. Japan, which was a customer of Indian yarn in the last century, gained an opportunity to build up a market in China due to these difficulties in the way of Indian exports. She became a strong rival to India in the Chinese market during the Great War and thereafter appeared so even in the Indian market. "The exports of cotton twist and yarn decreased from 244 million lbs. in 1899-1900 to 193 million (pre-War average of five years); to 130 million lbs. (War average of five years); to 82 (post War average of five years) and to 12.8 million in 1934-35."* It therefore shows that nearly the whole of the yarn produced in India is consumed within the country.

The cotton mill industry in India received a very great stimulus during the Great War. The supply of Lancashire

*Jathar and Beri Indian Economics, 29.

cotton goods diminished due to the mills concentrating themselves on war supplies and also because of the difficulties experienced in shipping. The prices of imported goods soared high and this combined with the demand within the country on behalf of the Government of India for goods required for the eastern theatres of war, resulted in a considerable increase in the production of piece goods during the War period, *viz.*, 1164 million yards in 1913-14 to 1614 million yards in 1917-18, as compared to 678 million yards in 1904-05. The difficulty in the import of machinery, necessitated by the extension of the industry, was, however, a handicap during this period. During 1914-15 to 1918-19 the number of looms increased by 25 per cent. though the number of mills and spindles remained practically unchanged. At the end of the war the industry experienced a period of boom which lasted till 1923.

The capital investment in the industry between 1917-18 and 1921-22 doubled. The percentage of dividends to paid-up capital in the case of Bombay mills were as high as 40.1, 35.2 and 30 in 1919, 1920 and 1921 respectively. This boom was not destined to last long. Depression came closely at its heels. The net profit which was 388 lakhs in 1932 turned into a loss of 134 lakhs in 1925. It was reported that out of 59 mills in Bombay 43 worked at a loss in 1925. The competition from Japan in the Indian market became very keen. Her ability to beat the Indian manufacturer on his own soil was due to the following causes :—

(a) Superior conditions of climate leading to greater efficiency of labour.

(b) Employment of cheap female labour.

(c) Failure of Japan to ratify the Washington Labour Convention regarding hours of work and prohibition of employment of women and children at night.

(d) Double shift working in factories.

(e) Larger and better organized purchases of raw cotton in India and the United States of America.

(f) Depreciation of the Japanese currency.

On the other hand, the cotton industry in India suffered from certain handicaps, such as the frequent changes in the currency policy and especially raising of the exchange rate from 1s-4d to 1s-6d, the defects in the organization and financing of the industry, absence of technical experts to guide it, uneconomic use of raw material, mishandling of machinery, etc. etc.

Year Ending 30th June.	No. of Mills.	No. of Spindles.	No. of looms.	Average No. of hands employ- ed daily.	Approximate Quantity of cotton consumed.	
					Cwts.	Bales of 392 lbs.
1880	56	14,61,590	13,502	44,410	10,76,708	3,07,631
1890	137	32,74,196	23,412	1,02,721	35,29,617	10,08,462
1900	193	49,45,783	40,124	1,61,189	50,86,732	14,53,352
1910	263	61,95,671	82,725	2,33,624	67,72,535	19,35,010
Year ending 31st July. 1914	271	67,78,895	1,04,179	2,60,276	75,00,941	21,43,126
1918	262	66,53,871	1,16,484	2,82,227	72,99,873	20,85,678
1922	298	73,31,219	1,34,620	3,43,723	77,12,390	22,03,540
1926	334	87,14,168	1,59,464	3,37,508	73,96,844	21,13,384
1930	348	91,24,768	1,79,250	3,84,022	90,07,999	25,73,714
1933	344	95,80,668	1,89,040	4,00,005	99,30,053	28,37,158
1936	379	98,56,658	2,00,062	4,17,803	1,10,98,963	31,71,418

YARN SPUN THROUGHOUT INDIA (INCLUDING INDIAN STATES)

(IN LBS.)

Counts	1930—31	1931—32	1932—33	1933—34	1934—35	1935—36
1—10	113,588,158	116,899,114	115,210,693	107,564,031	109,710,033	110,456,775
11—20	400,150,519	445,157,934	484,241,173	439,886,706	463,460,247	483,616,145
21—30	259,455,565	294,005,342	297,512,610	254,827,136	282,413,512	287,613,178
31—40	60,746,714	71,073,075	77,185,513	75,810,009	96,043,918	112,026,209
Above 40	27,310,831	34,001,363	36,593,749	37,358,405	43,876,496	58,528,164
Wastes, etc.	5,797,771	5,236,192	5,674,621	5,634,696	5,915,641	6,056,430
Total	455,886,074	966,373,020	1,016,418,409	921,060,983	1,001,419,817	1,058,296,901

*Indian Year Book 1937-38, Page 696.

PRODUCTION OF YARN AND CLOTH AND THEIR EXPORTS*

Year ending 31st March.	Mill production (in million lbs.)		Exports of yarn (in million lbs.)	Percentage of exports of yarn to total pro- duction.	Exports of cloth in million yards.
	Yarn.	Cloth.			
1899-1900	514	102	244	47.4	112
1913-14	683	274	207	30.3	130
Year ending 31st August.					
1918-19	615	349	73	11.7	187
1921-22	693	403	88	12.6	187
1925-26	686	465	32	4.7	165
1926-27	807	538	42	5.2	197
1927-28	803	567	25	3.1	168
1931-32	966	672	22	2.3	105

The figures of actual imports of cotton piece goods are given below :—

Year.	Yards (in crores).	Year.	Yards. (in crores).
1905-06	239	1927-28	194
1909-10	214	1930-31	87
1913-14	313	1931-32	76
1918-19	101	1932-33	120
1919-20	99	1933-34	77
1923-24	142	1934-35	97
1926-27	176		

Cloth industry under protection. In response to the demand of the cloth industry, the Government of India appointed in 1926 a special Textile Tariff Board to inquire into the conditions of the cotton textile industry in India and to make recommendations regarding grant of protection. The Board came to the conclusion that the industry had to face competition from Japan, which was unfair to it and suggested that an additional duty should be imposed on all cotton manufactures imported, other than yarn and a bounty should be granted on the spinning of yarn of counts 325 and above for four years. It noted down that an additional duty on yarn would go against the interests of handloom industry and mills possessing only weaving establishments and as such had to suggest differential protection for yarn and cloth. It also recommended the restoration of concession regarding free entry of machinery

*Prof. Brij Narain.—India Before the Crisis, p. 203.

and mill stores. The recommendations regarding import duty and bounty were not accepted by the Government of India but the import duty on all machinery and on certain mill stores was abolished.

The mill-owners received the decision with grave disappointment and made further representation to the Government for grant of protection. In September 1927, the Government decided in favour of imposition of a duty on cotton twist and yarn at $1\frac{1}{2}$ annas per lb. or 5 per cent. *ad valorem*, whichever was higher upto 31st March 1930 and the reduction of import duty on artificial silk yarn from 15 to $7\frac{1}{2}$ per cent. Even these measures could not satisfy the requirements of the industry and Japanese competition increased in severity. In 1929 Mr. Hardy was asked to make further enquiry into the textile industry and his conclusions also pointed towards the grant of further help. In 1930 the Cotton Textile Industry Protection Act was passed. The general *ad valorem* duty was raised to 15 per cent. and an additional 5 per cent. duty was imposed on non-British goods. In addition a minimum duty of $3\frac{1}{2}$ as. per lb. was levied on plain grey goods, to give particular help to Bombay. The discrimination between British and non-British goods, though made apparently to protect the industry against Japan, was a step towards Imperial Preference and this fact was pointedly brought forth in the Central Assembly, while discussing the measure. The Act of 1930 was extended to 1933. In 1931, at first, an additional import duty of 5 per cent. *ad valorem* was imposed on cotton piece goods and later on under the Supplementary Finance Act of 1931 a surcharge of 25 per cent. on all import duties was levied. These afforded additional protection to the industry. In April 1932 the Tariff Board was asked to make enquiries into the industry so as to enable the Government of India to take action on the expiry of the term of the duties imposed in 1930. The Board recommended further protection in view of the Japanese competition, made worse by the depreciation of the Japanese currency. As already remarked in the previous chapter, the trade-convention of 1904 between India and Japan had to be denounced. From 30th August 1932 the import duty on non-British cotton piece goods was raised to 50 per cent. *ad valorem*, with a minimum specific duty of $5\frac{1}{4}$ as. per lb. in the case of plain grey goods. The Japanese competition proved still very strong and these rates were further increased to 75 percent. *ad valorem* and $6\frac{3}{4}$ as. per lb. respectively. The protective duties imposed in 1930 were extended upto 31st October 1933 in the first instance and subsequently to 30th April 1934. The

Indian Tariff Amendment Act was finally passed in 1934 and came into force from 1st May. It affected a compromise between India, Japan and England and the protection granted to the cotton industry was now based on the agreement reached between these three countries. The import duty on non-British piece goods was fixed at 50 per cent. *ad valorem* subject to a minimum of $5\frac{1}{4}$ as. per lb. in the case of plain grey goods. This Act will expire on 31st March 1939.

JUTE INDUSTRY

Another highly organized industry in India is the jute industry.* So far as foreign trade is concerned, jute industry is more important than the cotton industry, jute production being a monopoly of India. This industry, however, owes its development to European enterprise and capital in contrast with the cotton industry which is Indian so far as management and finance are concerned. It is dominated by European management though more than 50 per cent. shares of jute companies are held by Indians. The cotton industry, as pointed out before, has got decentralised but the jute industry is highly centralised and is located within a small area on the banks of the Hooghly, near Calcutta. The average size of a jute mill is larger than that of a cotton mill. Although the industry is practically a monopoly of Scotsmen from Dundee, it was founded by an Englishman, George Acland, who brought a jute spinning machine from Dundee and started manufacture in 1885 at Rishra, near Serampore. Before that date raw jute was exported to and manufactured at Dundee. Bengal did not possess any fuel until 1854, when the demand of the East Indian Railway led to the opening of the Raniganj Coal-field. The possibilities of fuel led to the establishment of large scale manufacture with machinery. The first power loom was established in 1859 (at Basnapore, just near Calcutta). Soon after a number of mills sprang up. In the beginning the gunny cloths produced in India could not compete favourably with that of Dundee, being inferior in quality, but by the end of the century Calcutta goods could compete successfully against those of Dundee. The exports of manufactured goods thus increased. In spite of transport difficulties between 1917 and 1919 sand bags and other jute manufactures were urgently required for war purposes. After the close of the War, there was a boom followed by a depression and then a revival. It may be noted that the jute industry has been able to face the recent depression much better than the cotton industry. Original out-turn

*"In point of efficient organization, the jute industry is perhaps second to none in India."—Pillay—Economic Conditions in India.

was 8 tons, it grew to 2500 tons in 1909 and is 4000 tons per day at present. The progress of the industry from all aspects is revealed by the following figures :—

Years.	No. of mills at work.	Authorised capital (in lakhs of rupees.)	Number (in thousands) of			Production value in lakhs of rupees.
			Persons employed daily (average).	Looms.	Spindles.	
Average 1889-90 to 1893-94. ...	26	402.6	64.3	8.3	172.6	289.3
Average 1899-1900 to 1903-04 ...	36	680	114.2	16.2	334.6	826.5
Average 1909-10 to 1913-14 ...	60	1209	208.4	33.5	691.8	2024.8
1919-20 ...	76	1563.5	280.4	41.0	856.3	5001.5
1924-25 ...	90	2213.3	341.7	50.3	1067.6	5148.8
1929-30 ...	98	2184.6	313.2	53.9	1140.4	5158.7
1933-34 ...	99	2370.6	257.1	59.5	1194.4	2110.5
1934-35 ...						2124.5

Uptil 1914 the exports of raw and manufactured jute increased from year to year, the increase in the latter being much more than the former. During the War the exports received a set-back ; when the War was over, the exports showed increase in 1919-20 as compared with the average of the War period. In the following two years the exports recorded a decrease and in 1922-23 they again recovered. The total quantity of jute manufacture exported by sea from Calcutta during the year 1922-23 was 668,000 tons as against 639,000 tons in the preceding year and 603,500 tons in 1913-14. The value of the exports now amounts to Rs. 42 crores approximately.

Jute manufactures may be divided into four main classes :

(a) Gunny bags, used for packing rice, wheat, oilseed etc., (b) Gunny cloth or Hessians used for baling cotton wool and other fibres ; (c) coarse carpets and rugs and (d) cordage, spinning and weaving are included in all the jute mills and the internal organization is mostly similar. In 1884 the Indian Jute Mills Association was formed to control the trade. The Calcutta Jute Dealers Association has been formed to guard the common interests of its members as dealers in jute for local consumption. The Government of India has constituted the Indian Central Jute Committee in accordance with the recommendations of the Royal Commission on Agriculture. "The functions of the committee include agricultural, technological and medical research

the improvement of crop, forecasting of production, testing and distribution of improved seed; enquiries and recommendations relating to banking and transport facilities and transport routes and improvements of marketing in the interests of the jute industry.”*

“The chief problems are the labour problems, seasonal and periodical fluctuations in prices and uncertainty in demand. In spite of good profits earned by the employers, the wage earners are discontented so far as wages and conditions of work are concerned.”

THE IRON AND STEEL INDUSTRY

During the nineteenth century, the only successful attempt for the establishment of large-scale iron works in India was that of the Bengal Steel and Iron Company, which was started in 1874 in Bengal on the Jherria Coalfields; other enterprises which were started earlier were doomed to failure. The company could not obtain any profits till 1899. Its attempt to produce steel in 1903 resulted in a loss and was abandoned. In 1919 it was re-organised with larger capital as the Bengal Iron Company.

A remarkable stage in the development of the industry was achieved by the establishment of the Tata Iron and Steel Company at Sakchi (a small village in Chotta Nagpur about 155 miles west of Calcutta) in the Singabhum district in 1907. The site chosen was the best from the point of view of supply of raw materials.

The production of iron began in 1911 and that of steel in 1913. The name of the village was, later on, changed to Jamshedpur, in honour of Jamshed Tata, the pioneer of the steel industry. The Government granted assistance by undertaking to purchase on behalf of State railways about 20,000 tons annually of steel rails for a period of ten years, at a price not higher than that at which similar material could be imported, and sanctioned a concession of 0·15 of one anna per mile in the railway freight paid for raw materials required by the works. The market for the output was very promising as the total maximum output which could be produced by the company, *viz.*, 120,000 tons of pig iron and the conversion of 85,000 tons into 72,000 tons of steel, was less than the total import of such goods *viz.*, 450,000 tons of iron and steel goods. The company earned profits and received orders not only from the internal markets but also from Japan, China, Java, Burma,

*Indian Year Book, 1937-38, p. 704.

the Strait Settlements, Australia and South and West America.

During the War, the company received great encouragement from the Government. The demand increased to such an extent that by 1916-17 the whole plant was working to its maximum capacity. Large quantities of rails and sleepers were supplied for military requirements in Mesopotamia, Palestine, East Africa and Salonika. Extensions were planned, but owing to certain delays, these could not be complete till 1925. The old plant turned out finished steel products, such as rails, heavy structurals, bars, light structurals, light rails and fish plates. The new plant was meant to produce plates, sheets, sheet bars and sheet sleepers. The post War boom made the out-look of the industry "so favourable that plans were laid for the establishment of four more steel producing firms in India and the industry was quoted as the outstanding example of industrialization and of successful Indian enterprise and management."* The company earned fair profits up to 1920-21, when a sudden change took place in the prospects and the profits of the industry. The price of steel imports fell abruptly very low and it became impossible for goods produced in India to compete with them. The profits of the company decreased and even disappeared in 1923-24.

It was very lucky that the Government sanctioned the policy of discriminating protection in 1923 and appointed the Tariff Board. The claim of the steel industry submitted by the Tata Company was the first investigation before the Board.

Protection and the Steel industry. The Board came to the conclusion that the industry deserved grant of protection and it satisfied the conditions laid down by the Fiscal Commission. The Steel Protection Act was passed in 1924, embodying the recommendations of the Tariff Board. The protection was granted for a period of three years in the form of import duties on foreign goods and bounties on certain classes of local production, *e.g.*, import duty of Rs. 40 per ton and Rs. 30 per ton on steel bars and sheets respectively, and bounties on steel rails and fish plates at diminishing rates of Rs. 32, Rs. 26 and Rs. 20 per ton respectively in each of the three years for which the measures were introduced. The interests of the industries using steel as raw material were adequately protected by other measures. Higher import duties were imposed on fabricated steel (with the same exceptions) in the interest of the engineering industry.

* Vera Anstey, p. 244.

The wagon industry was granted bounty for a period of five years. The tin plate industry was protected by specific duties of Rs. 60 per ton on certain classes of wires and nails. Agricultural implements were not subject to any particular protection as that measure would be prejudicial to the interests of the poor agriculturists. Power was also bestowed on the Governor General in Council to increase the duties, if changes in the price of imports made the protection granted ineffective. The steel industry in India could not compete with the foreign imports due to its higher cost of production and the lower price of imports. The foreign firms had made huge profits during the War and were apparently selling at a loss, which was borne out of the reserves built previously. The protection granted by the Act of 1924 proved ineffective due to certain exceptional circumstances which transpired soon after. The price of foreign steel fell very low. The rise of exchange to 18 d., the heavy imports of Belgian steel at low prices and the accumulation of large quantities of stocks within the country forced the industry to apply for grant of further protection. A fresh enquiry was made by the Tariff Board and recommendations were made in favour of prompt action. The Board noted that "the proposed additional duties on unfabricated steel may appear very drastic, the increased duty being rather more than double the original duty in one case and rather less in the remainder," but was very emphatic in the imposition of duties so as to cover the gap between the lower prices of imported steel and those which the producers ought to obtain. The Government of India did not agree wholly with the Board and decided to grant bounties not exceeding Rs. 50 lakhs for one year, from 1st October 1924 to 30th September 1925. The bounty was calculated at Rs. 20 per ton of finished steel on not more than 70 per cent. of the monthly ingot steel production.

In June 1925 the Board made another enquiry and recommended grant of bounty at the rate of Rs. 18 per ton on 70 per cent. of the total ingot production, subject to a limit of Rs. 90 lakhs upto March 1927. The Government, however, granted only a bounty of Rs. 12 per ton with a maximum of Rs. 60 lakhs.

The Board conducted an examination of the progress of the industry under protection and recommended grant of further protection for a period of seven years. The system of bounties was not favoured and the imposition of import duties only was recommended as the more suitable form of protection. Accordingly the legislation provided for imposition of basic duties varying according to the exact

nature of the goods, with an additional duty on steel of non-British origin in certain cases. The basic duties were generally lower than those imposed between 1924 and 1927 but in many cases the additional duty on Continental steel increased the total to a higher level than before. The Steel Protection Act of 1928 embodied the following measures of protection :—

(1) The maintenance of the revenue duty of 10 per cent. and placing of all orders in India were considered sufficient for the protection of the railway wagon industry.

(2) A specific duty of Rs. 2 per cent. on steel bolts and nuts was imposed in place of the existing *ad valorem* duty of 10 per cent. The Wire and Wire Nail Industry Protection Act of 1932 was passed on the recommendation of the Tariff Board and a protective duty of Rs. 45 per ton on wire and wire nails was imposed upto 31st March 1934.

In accordance with the Indian Tariff Amendment Act of 1932 (Ottawa Trade Agreement) certain changes were made in the tariffs on iron and steel goods. The Acts of 1927 and 1932 were to expire in 1934 and therefore a review of the situation was made by the Board and the Iron and Steel Duties Act was passed, continuing protection till 1941. Changes were made in the customs duties which lowered the revenue realised from this source and so it became necessary to impose for revenue purposes a duty of Rs. 4 per ton on the production of steel ingots and to impose a counter-vailing customs duties on such goods, in addition to the protective duties.

The Progress of the Iron and Steel Industry. The general growth of the Iron and Steel industry is ascertained by figures pertaining to production and trade. The production of pig iron was 35,000 tons in the beginning of the twentieth century. It was 162,282 tons in 1914 : 232,268 tons in 1919 ; 1,376,000 tons in 1929-30 ; 1,140,000 tons in 1930-31 and 1,343,075 tons in 1934-35. The imports of pig iron have dwindled now considerably. They were 1500 tons in 1934-35 and 1700 tons in 1935-36. The production of steel increased from 139,433 tons in 1916-17 to 599,565 tons in 1927-28 and finished steel from 98,726 to 428,654 tons. The production of steel ingots was 834,000 tons and that of finished steel 627,000 tons in 1934-35.

Imports of Iron and Steel.

Year	Quantity	Value in crores of rupees
Pre-War average	808,000 tons	12.48
War average	422,000 ..	10.11
Post-War average	661,000 ..	21.38
1929-30	968,000 ..	17.16
1930-31	608,000 ..	10.86
1931-32	369,000 ..	6.31
1932-33	324,000 ..	5.29
1933-34	323,000 ..	5.5
1934-35	367,000 ..	6.37
1935-36	446,000 ..	7.2

The internal demand for iron and steel has been growing with the industrial growth of the country. The expansion of Indian iron and steel production therefore cannot be fully judged from the fall in their imports.

SUGAR INDUSTRY

The Indian Sugar Industry is at present the second largest industry next in importance to only the cotton textile industry and gives employment to over 100,000 workers. The total production of the 7,000,000 tons of raw sugar (gur) in India places it in the position of the largest producer in the world.

In 1930-31, the question of grant of protection was considered by the Tariff Board and pending consideration of the decision on the subject, the Government fixed the revenue duty at Rs. 7-4-0 per cwt. in March 1931, and imposed a revenue surcharge of 25 per cent. (which amounted to Rs. 1-13-0 per cwt.) in September 1931.

The Government announced its policy of protection on 30th January 1932 and fixed the protective duty at the rate of Rs. 7-4 per cent. on all classes of sugar until March 31, 1938. The total import duty on foreign sugar thus amounts to Rs. 9-1-0 per cwt. at present.

During the year 1934-35, an excise duty of Rs. 1-5-0 per cent was imposed on factory production. The excise duty was subsequently raised to Rs. 2 per cwt. in 1937. The object of this duty was to compensate the Government for the loss in revenue and to check the too rapid growth of the industry. Out of the proceeds of this duty, one anna per cwt. was decided to be distributed among the provinces for the purpose of assisting the organization and operation of co-operative societies among the cane growers so

as to help them in securing fair price".¹ The industry thus enjoys a protection of Rs. 7-1 a. per cent. after the payment of the excise duty. The industry has made remarkable progress under protection. The following statistics² will speak for themselves.

A further enquiry has been made in 1937 by the Tariff Board appointed specially for this purpose. The report and the Government decision on it have not yet been published.

Year.	No. of factories.	Quantity of sugar manufactured from cane (tons).	Quantity of sugar refined from gur (tons).	Quantity of khandsari production (tons)	Total quantity of sugar (tons).
1929-30	27	89,768	21,150	200,000	310,918
1930-31	29	119,589	31,791	200,000	351,650
1931-32	32	158,581	69,539	250,000	478,119
1932-33	57	290,177	80,106	275,000	645,283
1933-34	112	453,965	61,094	200,000	715,059
1934-35	130	578,115	30,103	150,000	757,218
1935-36	137	912,000	54,600	125,000	1,091,600
1936-37 (estimate).	150	975,000	50,000	125,000	1,150,600

The increase in production has been accompanied by a decrease in imports, as shown below:—

Years	Quantities
Upto 1930—31	one million tons approximately on an average.
1931—32	550,000 tons
1933—34	250,000 "
1934—35	221,000 "
1935—36	198,000 "
1936—37	28,000 " estimate.

The Government revenue also decreased from over 10 crores in 1930-31 to 3·81 crores in 1934-35 and 3·23 crores in 1935-36. The excise duty of Rs. 1-5 as. per cent. and 10 as. per cent. on Khandsari sugar yielded a revenue of Rs. 97,22,000 in 1934-35 and 1,58,52,000 in 1935-36. The Khandsari

1. "After careful consideration of all these points we have decided to propose a dual policy ; on the one hand the imposition of an excise duty on factory produced sugar, and on the other hand the introduction of legislation by the Central Government which will enable the Provincial Governments to apply schemes for enforcing a minimum price for cane to be paid by the factory to the grower."—Sir George Schuster.

2. Indian Year Book. 1937-38.

production has decreased considerably, as is evident from the figures given above.

The following figures regarding production and consumption are illuminating :—

	1932-33 (Actual) Tons	1933-34 Est. Tons	1934-35 Est. Tons	1935-36 Est. Tons	1936-37 Est. Tons	1937-38 Est. Tons
Indian sugar production of the preceding cane-crushing season.	478,120	645,283	715,059	757,218	1,091,600	1,159,000
Consumption of sugar in India during the official year.	895,280	880,757	932,000	1,015,000	1,059,000	1,100,000
Difference between production and consumption representing margin for imported sugar entering into consumption during the official year.	417,160	235,474	216,941	257,782	-32,600	-50,000

TANNING AND LEATHER INDUSTRY

The raw materials for this industry exist to a large extent in the country. Before the Great War, raw hides valued at over seven crores of rupees were exported to other countries. The Great War gave a great stimulus to the industry. The Indian Munitions Board took active steps for the development of leather manufactures required for war purposes. It has been estimated that the annual out-turn of boots and shoes in India was twenty times greater at the end of the War than what it was before it. The Government took action to foster the development of the industry in 1919, when the Tariff Act of 1894 was amended and an export duty of 15 per cent. was imposed on hides and skins, with a rebate of ten per cent. on hides and skins exported to other parts of the Empire and tanned there. The object of this measure was to ensure the conversion of hides and skins into tanned leather in India as far as possible and failing that in other parts of the Empire, instead of being

exported in a raw form to foreign countries. The duty did not, however, succeed in its purpose. The Fiscal Commission objected to this bill and suggested that an import duty should have been preferred. In 1923, the duty was reduced to 5 per cent. as a revenue measure and the 10 per cent. rebate was abolished.

The five per cent. duty on raw hides was abolished in 1934 and that on raw skins in 1935. The industry deserves protection as a key industry. As was pointed out by the Indian Fiscal Commission, it requires organization and expert skill. The exports of raw hides and skins during the last five years are given below :—

1931-32	1932-33	1933-34
Rs. 3,65,71,000	2,76,87,000	4,25,33,000
1934-35	1935-36	
Rs. 3,13,07,000	4,13,10,000	

PAPER MANUFACTURE

The manufacture of mill-made paper is nearly seventy years old in India. Paper mills have been established in different provinces, *viz.*, Bengal, Bombay, the United Provinces, Madras and Travancore. Recently the Punjab Paper Mills Company started work near Saharanpur. The production of paper in India amounted to 892,000 cwts. in 1934-35. The material used generally is Sabai grass. The Indian Paper Pulp Company manufactures paper from bamboo pulp.

If Indian bamboo could be used in the manufacture of paper, the prospects of the industry could improve.

The Tariff Board made investigation into the industry in 1924. The Board enquired into that kind of paper only which was manufactured in India and excluded from its purview, news print papers, paste boards etc., which could not be supplied by the Indian manufacturer. It came to the conclusion that paper pulp and bamboo paper could be manufactured in India. It suggested protection in the form of import duty of one anna per lb. on certain class of paper competing with Indian products and a loan or a guarantee in respect of both principal and interest of Rs. 10 lakhs to the Indian Paper Pulp Company at Naihati.

The Board did not consider the claim of protection to paper manufactured from Sabai grass strong enough in view of the difficulties of sufficient supply of raw material and fuel near each other.

The Bamboo Paper Protection Act of 1925 was passed and an import duty of one anna per lb. was imposed in accordance with the recommendations of the Board, whose

other proposals regarding loans etc. were rejected. The duty was to expire in 1932, when the Board made a first recommendation in favour of protection. According to the Bamboo Paper Industry Protection Act of 1932, the protective duty was extended up to 31st March 1939 and further a first import duty of Rs. 45 per ton was imposed on wood pulp in the interest of bamboo pulp manufacture in India. The duty on wood pulp was increased to Rs. 56-4 as. per ton by the 25 per cent surcharge imposed on this protective duty in financial crisis of 1931. In a communique, dated 25th June, 1938, the Government of India announced the removal of this surcharge leaving the duty on imported wood pulp again at Rs. 45 per ton.

Unless India is able to produce a larger variety of paper than she is doing at present it is feared that "in a year or two over-production would cause such internal competition as would render the protective tariff largely ineffective."*

Match Industry. The development of the industry took place from 1922, when the Government imposed an import duty of Re. 1-8 per gross (more than 100 per cent. *ad valorem*) for revenue purposes. The raw material is easily available, labour supply is cheap and the home market is sufficiently extensive. There are at present 27 factories working in India. In 1928, the Tariff Board recommended grant of protection by converting the revenue duty of 1922 into a protective duty for an indefinite period. The Match Industry Protection Act was passed in September 1928. An import duty of Rs. 1-8 a. was levied on a gross of boxes each containing 100 matches, a duty of 4½ as per lb. was levied on undipped splints and of 6 as per lb. on veneers used in box-making.

The establishment of match factories in India by the Swedish Combine which controls seventy per cent. of the total demand of the world, is the greatest grievance of the Indian manufactures. It is an illustration of a foreign manufacture establishing itself bag and baggage behind the tariff wall and competing with the local manufacturer on its own ground. Neither the Tariff Board nor the Government of India has acceded to the representations of the people in this behalf. The Government, while declining to remedy the situation, has given the assurance that special precautions would be taken if the Swedish Combine proved a menace by developing into a monopolistic concern.

The Matches Excise Duty Act was passed in 1934. Excise duty was imposed at the rate of (a) Re. 1 per gross of boxes or booklets if the average number is 40 or less ;

* F. D. Pudunjee, chairman of the Deccan Paper Mills Co., Ltd.

(b) Re. 1-8 if the average number is more than forty but less than 60 and (c) Rs. 2 if the average number is more than 60. The rate of excise on all other matches was levied at 4 as. for every 1440 matches or fraction thereof. "The Act also revised the customs duties on imported matches in such a manner as to comprise rates which maintained the existing measure of protection to the Indian industry over and above the equivalent of the new excise duty."

The growth of match industry in India and the extent to which the local demand is satisfied by it can be judged by the following figures regarding import of matches.

1921-22 Rs. 204 lakhs	1930-31 Rs. 4 lakhs	1931-32 Rs. 1 lakh and 5 ths.	1932-33 Rs. 52 ths.
1933-34 Rs. 74 ths.	1934-35 Rs. 62 ths.		1935-36 Rs. 1 lakh 9ths.

Heavy chemical industry. The Tariff Board made investigations into its claim for protection in 1928. Its importance as an important key industry was emphasised and it was reported that it satisfied the conditions laid down for grant of protection. Specific duties, equivalent to *ad valorem* duties of 44 per cent. and 34 per cent. were proposed for epsom salts and zinc chloride respectively. The duties levied on other chemicals were proposed generally at the existing level of revenue duties. The duties were recommended for a period of seven years, after which a fresh enquiry could be made. For the manufacture of superphosphate, a bounty was suggested. Reduction in railway freights was also recommended in the interest of the industry. The Heavy Chemical Industry (Protection) Act of 1931 was passed on October 1st 1931 adopting some of the recommendations of the Tariff Board. Protection duties were imposed on magnesium chloride and other heavy chemicals.

Glass industry. It is an old industry. It exists as cottage industry for the manufacture of bangles and as large-scale factory industry, manufacturing different articles such as glass tubing, flasks, beakers, test tubes, flowerpots etc. The Tariff Board made an inquiry into the industry in 1931-32 and submitted proposals for grant of protection in the form of import duties, for a period of ten years on sheet and plate glass, bangles, beads, false pearls, glass and glassware. The Government of India did not take any immediate action on the report and announced its decision in June 1935, rejecting the claim of protection

in absence of local supplies of soda ash (raw material). The Government, however, did not consider this as its final decision, which would be given when fresh sources of this raw material would be found out. A concession in the form of a rebate of duty on imported soda ash was, however, given for three years, the rebate being full in the case of British and colonial material and partial in the case of non-Empire imports.

Cement Industry. The demand for cement in India has been rapidly growing in recent years. This has been caused by the expansion of cement and ferro-concrete works. The production has increased from 945 tons in 1914 to 236,746 tons in 1924, 593,000 tons in 1932-33, 643,000 tons in 1933-34, 764,000 tons in 1934-35. India imported about 180,000 tons a year before the War and these have shown decline with the increase in home production. In 1914 the imports stood at 165,733 tons, in 1924 they were 124,186 tons, in 1930-31 112,000 tons and in 1934-35, 67,000 tons only.

The Tariff Board admitted the presence of raw material and its proximity to railway lines in several parts of India but noted that factories were at a distance from the coal fields and the ports of Bombay and Calcutta, the principal markets for cement. The Board rejected the claim of the industry for protection as it was calculated that the production was greater than the total demand. In view of the difficulties of the industry it proposed that a law should be enacted authorising the Government to pay bounties on cement despatched from factories to certain ports or railway stations within a certain distance from these, provided that it did not lead to a fall in its price as compared to the imported cement. The Government of India did not accept these recommendations.

The cement industry has well-organized itself under the Associated Cement Companies Ltd. The country is becoming more or less self-sufficient in regard to cement supply. The quality of Indian cement stands in comparison with that of the imported one.

"The industry's (cement) contribution to national prosperity may be gauged from the figures relating to its output and sales in 1935-36. Nearly Rs. 1½ crores was paid in railway freight and over Rs. 1¾ crores of jute bags were used for packing cement. The industry consumed about 4½ lakhs of tons of Indian coal and about 10,000 dealers and agents put about 9 lakhs of tons of Indian made cement on the market."*

Printer's Ink. The Tariff Board made an enquiry in this industry on the representation of the Hoogly Ink

*Indian Finance Year Book 1937.

Company and recommended the increase of import duty from $2\frac{1}{2}$ per cent. to 5 per cent. on printer's ink. The Government accepted the recommendation and gave effect to it in 1926.

Coal Industry. The claim of protection in favour of coal industry was urged particularly on account of the competition of South African coal. The Tariff Board conducted an enquiry in 1926 and came to the conclusion that no case for protection in general had been established but recommended a duty of Rs. 1-8-0 per ton. The Government agreed with the findings of the Board that no case for protection had been established and announced that the imposition of any duty was not justified.

To help the export of Indian coal it was necessary that Indian coal should be of good and uniform quality. The Indian Coal Grading Board classifies the different seams at Indian collieries, prepares a grading list and grants certificates of shipment. Collieries included in the grading list receive a special rebate on railway freight and a reduction of port dues and of shipment of cargo coal approved by the Grading Board.

Gold Thread Industry. The Tariff Board after enquiry recommended the industry for grant of protection. The Government of India agreed with the Board and passed the Gold Thread Protection Act in 1931, granting protection for a period of ten years.

Cottage Industries.* Cottage industries gave at one time a position of great industrial eminence to India. Their decline was brought about by a number of causes. "The decline of Indian manufactures and indigenous industries within the last 150 years is one of the saddest episodes of British rule in India and presents one of the most difficult economic problems to Indian administrators at the dawn of a new century."

The fact that the industrial progress of a country is measured by the growth of its large-scale industries does not belittle the importance of its small-scale industries. Even in countries which have attained excellence in large-scale industries, small-scale industries exist side by side; for instance Germany, France, Switzerland and Japan. In certain fields of industrial activity, for instance, on the production of goods involving artistic designs and

* Cottage industries were so called because they were carried on in the cottages of the artisans and required small capital. The artisan did not engage outside labour but worked with the assistance of his family.

exquisite beauty, hand work and small-scale production are indispensable.

The modern use of electric power instead of steam tends to encourage small-scale units without sacrifice of economies in production. A number of small-scale enterprises, like small repair workshops have come into existence even with the growth of large-scale industries. Again, large scale industries can be established after experiments started on a small scale prove successful. In India the tenacity which the cottage industries have shown even in the face of adverse foreign and local influences makes one realise that they will continue to loom large in the economic life of the country. Moreover, factory industries employ only a little over one per cent. of the country's population out of about 10% engaged in industries.

The Indian Industrial Commission remarked : "A general view of the evidence tendered to us, supplemented by numerous inspections in the towns and villages that we visited, confirms us in the conclusion that cottage industries are a very important feature in the industrial life of India ; that they are by no means so primitive as they are usually depicted ; and that there is no real ground for belief that they are generally in a decadent condition. We have been unable to obtain accurate statistics regarding the actual number of cottage workers in the various cottage industries but in every town they still form a large percentage of the population and they are to be found in almost every village, so that their numbers are still vastly larger than those of the operatives employed in organised industries."

The wave of modern industrialism has not produced uniform effects on all classes of cottage industries. Some of them like the hand-spinning industry have altogether collapsed and it is impossible for them to survive and compete with machine industry. Hand spinning functions in a very limited sphere as a subsidiary occupation. Some of the cottage industries are just struggling for existence against severe machine competition. The lot of the artisan working in such industries is miserable. His conservatism and want of initiative force him to cling fast to his hereditary occupation. There are still other cottage industries, which have got much scope not only for existence but for improvement. The local demand for the artisans' products, proximity to raw material or the individual character of the goods produced and the difficulty of introducing machinery in their production may be responsible for giving such industries a position of vantage. The economic self-

sufficiency of the village has not disappeared altogether and affords protection to the cottage worker. The artisan has also exhibited a certain degree of adaptability, which is sure to prove of immense benefit to him. In the words of the Industrial Commission :—

“ His methods remain the same, but in some instances he works with superior raw materials and in others with better tools. The weaver has taken to mill yarn, the dyer to synthetic dyes, the brass and copper smith to sheet metal, the blacksmith to iron rolled in convenient sections, in each case with advantage to himself from the lessened cost of production which has greatly extended his market. In some districts in lower Bengal, the weavers use fly-shuttle slay extensively, and they have recently adopted in large numbers in the coast districts of the Madras Presidency, while it is also gradually coming into use elsewhere. The tailors invariably employ sewing machines and town artisans readily take to improved tools of European or American manufacture.”

As noted by the Industrial Commission, cottage industries are scattered in all villages and towns, the nature of work undertaken by each one of them depending upon the local circumstances regarding raw materials, labour and market. Subsidiary industries for the agriculturist like cattle goats and sheep rearing, dairy farming, bee keeping, handloom weaving, silkworm rearing have an important place in the agriculture economy of India.

Rice husking by hand and oil milling, tanning and shoe manufacture, glass bangles manufacture, embroidery furniture making, metal works and cutlery, gold and silver thread industries, pottery, soap making, cap making, cotton and woollen textiles, dyeing, silk weaving, toy making, etc. are in existence in both towns and villages.

Suggested remedies for defects. “ It is needless to emphasise the artisan’s conservatism, lack of ambition and present inability to appreciate a higher standard of living. They are very ignorant and obviously the first step towards their improvement is to educate them.”*

• There should be dissemination of literacy and general education. The training of the artisans in the technique of arts and crafts and imparting of commercial training to the master workmen are necessary. In addition to this measure, the following proposals have been made by the Industrial Commission :—

* Industrial Commission Report para 260.

(1) The establishment of a central silk reeling and twisting factory.

(2) Grant of loans and supply of tools and plant on hire purchase system to the cottage workers.

(3) Supply of new ideas and designs to the workers.

(4) Stimulation of demand and improvement in the methods of marketing for the cottage workers' products.

(5) Encouragement of industrial co-operation.

(6) Co-ordination of the activities of the Government Departments of Industries, Agriculture and Co-operation.

The successful working of cottage industries in Japan and Germany have been found to rest on three fundamentals. First, masses are literate due to compulsory free education. Secondly, in every village the motive power, that is, electricity as also gas, is available cheap. Thirdly, there is a certain average knowledge of sciences like chemistry and physics. These preliminary conditions must be provided in order to ensure the progress of cottage industries in India.

The Government of India and the Provincial Governments are taking action on the various recommendations of the Commission. Provision of instruction, demonstration of better methods of production, improvements in marketing, participation in exhibitions and grant of financial aid, are some of the principal measures. In the United Provinces, the Industrial Credit Bank encourages the investment of private capital in small industries under a State guarantee. Similarly the Marketing and Finance Company will provide marketing finance.

The Inter-provincial Industries Conference held in July 1934 discussed schemes submitted by the Provincial Governments for the development of the handloom industry. The Government of India announced its decision of the granting of Rs. 5,50,000 annually for this purpose. From November 1934 to March 1936 Rs. 5,75,000 were placed in the hands of the Provincial Governments. The improvements financed by the Government include measures regarding "the training of weavers in improved methods of production, the establishment of sales depots and weavers' co-operative societies for marketing of handloom products and the introduction of new patterns, new designs and improved appliances."*

In the field of sericulture and silk manufacture, steps are being taken in the provinces concerned to render help

*Jathar and Beri Indian Economics Vol. II, page 88.

to the industry. In 1936, while the Government of India rejected the recommendation of the Tariff Board for grant of protection to the woollen industry, it sanctioned a grant of Rs. 5,00,000 to be spread over five years for the benefit of the cottage industry.

Large-scale versus small-scale industries. The future policy of India should be directed towards developing medium-size and small-scale industries along with large-scale industries. While making marvellous progress in her large-scale industry, Japan has not by any means neglected her medium and small size industries. The cottage industries of Japan are numerous and flourishing. "The kind of industrial organization which is even more pregnant with possibilities is that of the small factory employing only a few persons, but equipped with the latest mechanical and other appliances." Here is an object lesson for India.

Out of a total population of 17·5 millions employed in industry, only about one-and-a-half millions are employed in factories coming under the Factories Act. The major part of our industrial population is engaged in small-scale ventures and this is likely to be the position in future. Large-scale factories cannot provide employment for the millions of India's unemployed although they will open up fresh avenues of employment. As machine displaces men, large-scale production cannot solve our unemployment problem. Small-scale industries will provide a subsidiary occupation to our farmers who cannot find employment in agriculture throughout the year. Industries connected with agriculture such as dairying, fruit preserving and canning industry, jam making etc., can be started on a small scale.

Small-scale industries to be successful require a perfect organization. Let us take the case of the Japanese hosiery industry. "A big association in Tokyo owns a large number of small hosiery machines. Electric power is very cheap in Japan and these machines work with electricity. This association lends its machines to Japanese farmers and other workers who live in the villages, and are prepared to work according to the instructions received from this association.

Through this centralised organization all small scattered farmers are working on a definite plan and according to certain standardised patterns. These workers can afford to charge lower wages because they use it as subsidiary occupation. Women and children are also employed in this work during their leisure hours. The products of these scattered workers are also collected and graded and standardised by experts in Tokyo and instead of this stock being

sent *ad hoc*, it is branded with certain specific trade marks and carries the guarantee of this association as to the genuineness of the product. Thereby Japan is able to supply the hosiery needs of the world at much cheaper rates and more effectively."

Let us develop large industries where circumstances require it. There are bound to be many such industries keeping in view the natural resources and requirements of such a vast country as India. But small-scale and cottage industries (with electric power, latest mechanical and other appliances, a perfect marketing organization etc.) should form an integral part of India's industrial planning.

SUMMARY.

Large-scale industries are growing in India as is revealed by relevant statistics. Industries in India are classified as follows :—

- (a) Those supplying the home market and manufacturing goods for export.
- (b) Industries owned and financed by Indians, and foreigners.
- (c) Industries managed by Indians and foreigners.
- (d) State owned and privately owned industries.
- (e) Industries receiving protection and those not receiving protection.

The cotton mill industry in India has steadily grown from 1818. It got localised originally in Bombay but it has now spread over to other parts of India also. The Great War gave a great stimulus to the industry. There was a great boom in the industry after the War, which was followed by a very severe depression. Japanese competition proved very severe against the industry. It is now improving under protection granted to it. Statistics have been given relating to the growth of the industry. Production has increased and imports of cotton piece goods have decreased considerably. Jute industry is also highly organised. It is, however, dominated by European management as against cotton industry, which is wholly Indian so far as management and finance are concerned. Jute is a monopoly of India. Jute industry got established in India in 1855. During the War the demand for the products of the industry increased remarkably. In this industry also the war period was followed by a period of boom and depression. Figures regarding the growth of the industry and its exports are given. The industry has got its own problems which need solution.

Though the iron and steel industry on a large scale started earlier, the establishment of the Tata Iron and Steel Company in 1907 marked a landmark in the development of the industry.

The industry developed to a considerable extent during the Great War. Up to 1920-21 the Tata Iron and Steel Company went on earning profits when a sudden change took place for the worse. The period of depression that followed was very acute. Fortunately the Tariff Board began to function soon after and after full investigation granted protection to it. The period of protection was fixed at 3 years and it was extended by seven years. It has again been extended by another seven years.

Sugar industry is the second largest industry, at present next in importance to the cotton textile industry. The grant of protection in 1932 gave a fillip to the industry. Factory productions of sugar increased commonly along with the number of factories under protection. During the year 1934-35 an excise duty of Re 1-5 per cwt. was imposed on factory production.

Tanning and Leather Industry. Before the Great War raw hides of the value of seven crores of rupees were exported. The Indian Munitions Board took active steps towards the development of the industry for war purposes. In 1919 an export duty on hides and skins was imposed, with a rebate in favour of the Empire. The duty was reduced and finally abolished.

The paper industry was granted protection in 1925. The match industry was granted protection in 1928 but the Indian factories labour under great disadvantages due to the competition of the Swedish Combine. An excise duty on matches was imposed in 1934.

The other industries which have received protection in recent years are the heavy chemical industry, printer's ink manufacture, and gold thread industry.

Cottage industries in India at one time won for it a great fame in the world. Their decline was brought about by a number of causes. In spite of machine production, some of the cottage industries continue to retain their importance. As subsidiary industries to the agriculturist their utility can hardly be exaggerated. A number of suggestions have been made for their improvement by the Indian Industrial Commission.

While large-scale industries should be developed small-scale and cottage industries should form an integral part of India's industrial planning.

QUESTIONS ON CHAPTER XII

1. Attempt a statement of the industrial position of India. (P. U. 1925)
2. Explain and illustrate the principle of localisation of industries by giving examples of large and small industries in India. (P. U. 1931)
3. Explain the position and importance of the cotton mill industry in India and discuss how far it has been able to stabilise itself as a result of the protective duties recently granted to it. (P. U. 1934)

4. Compare the position of jute industry with the cotton industry in India. What are its particular problems ?

5. Discuss the progress of the iron and steel industry in India ? How far and in what manner has it benefited by the grant of protection ?

6. Discuss the effects of the excise duty on Indian sugar imposed by the Central Government in 1934 on the cane cultivation on the one hand and the Indian sugar industry on the other.

7. What are the peculiar difficulties of the match industry in India ? What remedies can be suggested ?

8. How do you explain the survival of the cottage industries in modern India ? What means would you suggest to improve their efficiency in the face of competition with machine industries ? (C. U. 1930)

9. Examine the causes of the vitality of the cottage industries of India and show how the defects in their present position might be removed by suitable measures adopted in the matter of training, organisation and marketing. (P. U. 1920)

10. Will it be more beneficial for India to concentrate on the development of her cottage industries or on large-scale manufacturing industries ? Give detailed reasons for your answer. (P. U. 1936)

CHAPTER XIII

INDUSTRY: TARIFF POLICY

I. Free Trade versus Protection. Before examining the tariff policy in India, the fundamental principles involved in the consideration of the problem of Free Trade versus Protection may be briefly discussed, especially, in relation to India.

The advocates of free trade start with their main principle *viz.*, the law of comparative costs in defence of their theory. They further give the following arguments :—

(a) Protection is not necessary for the diversification of occupations in a country which has varied natural resources.

(b) Protection imposes a great hardship on the consumers. It is a sacrifice on the part of "the less acute, the less enterprising, the less educated and the poorer classes" for the benefit of the abler, the wealthier and better educated classes. It is against the interest of small-scale producers since protection raises prices and wages, though the latter lag behind the former.

(c) It creates monopolistic control and vested interests, which sometimes demoralise the administration of a country.

(d) From the point of view of revenue the protectionist argument is weak ; since the more effective the protective duty the lesser will be its yield.

(e) The argument that protection is necessary in the interest of the economic self-sufficiency of a country and the development of a home market, is not a conclusive one. Some of the home products will find out foreign markets and a country which sells abroad must buy abroad also.

As against these, the protectionist comes forward with more convincing arguments.

The infant industries argument is the strongest argument on his side. In the case of India, it is found that the infant industries cannot compete with the well-established and grown-up industries of other countries, in absence of protection. The statement of Late L. Harkishan Lal made before the Indian Fiscal Commission, "Nurse the baby, protect the child and free the adult" has been generally approved by all. It implies that protection is to be granted only for a temporary period and thus the sacrifice involved on the part of consumers is not a long one.

That protection is needed to diversify the occupations of a country is also an argument of great importance in the case of India. The resources of India are no doubt varied, but in absence of a policy of State help and protection, it is not possible for her people to exploit these satisfactorily. That the industrial position of India remained very weak and other countries poured in their manufactured goods here to the detriment of the indigenous manufacturer for a long time, before the protective policy was adopted, affords sufficient strength to this argument. The unemployment among the people, especially the educated middle class, is mostly the result of want of varied and multifarious occupation, the existence of which will absorb them. The necessity for establishing in a country those industries which manufacture the requisites of war was amply demonstrated by the Great War in India. Even the most orthodox advocates of free trade policy have to admit the essential strength of this argument.* 'Adam Smith' in dealing with the exceptions to his doctrine of *Laissez Faire* says that defence is of greater importance than opulence. On this principle he approves of the Navigation Acts..

There are other occasions also when protection is urged, e.g., when foreign goods are dumped and the indigenous manufacture has got to be protected. Generally speaking, the free trader has now lost much of his ground and even England, which was once the strongest advocate of free trade, has become protectionist. For developing the nascent industries of India it is now generally agreed that protection should be granted.

The cost of Protection and the need for Discriminate Protection. Though there is a strong sentiment in favour of protection it should be adopted with discrimination and

*Adam Smith deals with certain exceptions to his doctrine of *Laissez Faire*. He says that there are two cases in which it will be advantageous to protect the home industry and there are two others where it may be a matter of deliberation. Out of the first set he mentions one, where the question of defence arises and those industries which manufacture the requisites of war should be protected under the second exception he states that it is necessary to tax a foreign commodity if precisely the same home commodity is taxed.

The two exceptions worthy of deliberation are :—

(a) The case of retaliation. If by retaliation the foreigner will be persuaded to remove the objectionable duties imposed on a country's products, it may take recourse to this measure. It should not, however, lead to further retaliation.

(b) The case of vested interests :—

Where an industry has been protected in a country and a large number of people are employed there, the freedom of trade should be restored through slow gradations.

the sacrifices involved in it should be minimised. The consumer should no doubt bear the cost of developing the productive power of the country but only to a reasonable extent. It should not be forgotten that India is a poor country and the effect of protection will raise prices, thus adversely affecting almost all classes of people. Cultivators will be affected by a rise in prices and so will be labourers in all industries, though the latter will gain by a rise in wages, which will tend to follow prices. The industries not protected will in particular suffer by a rise in the expenses of production.

II. INDIAN TARIFF HISTORY

(i) *From early times up to 1921-22.* During the Hindu rule in India tariffs were used to control and regulate trade and industry. Though these restrictive measures¹ existed both during the time of the Hindu and their successors, the Muslim rulers, the purposes of such taxes were mainly the collection of revenue. The rates of customs duties were low and during the time of the Moghuls they did not exceed 5 percent. *ad valorem*. But the inland duties were very complex and impeded trade. With the disruption of the Moghul Empire and the growth of a number of smaller States, these duties naturally offered greater complications. The East India Company, which was initially a trading corporation, felt the effect of these impediments and demanded an exemption from these dues.

"In 1716, a *firman* was granted by the Emperor of Delhi, exempting the Company's trade from duties, on, the payment of a *peshcush* of 10,000 rupees a year."²

On the assumption of its rule, the Company adopted its own tariff system. By the end of 1844, the inland duties were abolished. "In the manufacture, though the import duties on goods entering India continued to be levied to some extent at different rates in different provinces, a fairly consistent tariff had been evolved. Generally speaking, the duties on raw produce were at the rate of 3½ per cent. and on manufactured articles at 3½ or 5 per cent; but until 1848 these duties were doubled in the case of goods imported in foreign ships. After this date the nationality of the shipping was ignored, but differential duties continued to be levied up to 1859 in accord-

1. Government control in this regard was on a scale that would satisfy the extreme claim of modern protectionism and state socialism—Kale's Indian Economics.

2. Fiscal Policy in India —P. N. Bannerjee.

ance with the nationality of the goods, being double the duty on British goods."¹

The Mutiny of 1857 increased the military expenditure of the Government and necessitated the enhancement of the general import tariff from 5 per cent. to 10 per cent. the differential duties on British and foreign goods being abolished. The duty on cotton yarn was raised from $3\frac{1}{2}$ to 5 per cent. The extraordinary financial situation having been eased, the duties were lowered in the succeeding years, till in 1875 the general tariff was reduced to 5 per cent. and a number of export duties were abolished. In 1862 the duties on cotton piece goods and yarn were reduced to 5 per cent and $3\frac{1}{2}$ per cent. respectively. A strong agitation was raised by the Lancashire cotton interest and the Home Government instructed the Government of India to abolish the import duties on cotton. In 1882, therefore, the cotton duties and the whole of the customs duties were abolished. From 1882 to 1894, India adopted free trade with only a few minor necessary exceptions.

In 1894, the Government was feeling financial embarrassments due to fall in the sterling value of the rupee and the five per cent. import tariff was restored, exception being made in the case of machinery, railway material, iron and steel goods.² Liquors and tobacco were, however, subject to higher duties. The Secretary of State objected to the re-imposition of duties on cotton goods, but the necessity for raising revenue was paramount. It was, therefore, decided in December 1894 to impose an excise duty of 5 per cent. on Indian yarn of counts above 205 along with the five per cent. import duty on cotton piece goods and yarn. Even this did not satisfy the Lancashire cotton industry. Further pressure was brought on the Indian Government and in 1896 the import duty on cotton piece goods was lowered to $3\frac{1}{2}$ per cent. only, cotton yarn was admitted free of duty and $3\frac{1}{2}$ per cent. excise duty was fixed on all Indian mill manufactured cloth. The tariff policy remained unaltered in this manner till the out-break of the Great War. During the Great War, enhancements were made in the tariff, due to the exigencies specially created. The general duty was raised from 5 to $7\frac{1}{2}$ per cent. The list of exceptions was cut down. Machinery, other than that for cotton mills, and railway material were now subject to a duty of $2\frac{1}{2}$ per cent. and the duty on iron and steel was raised to $2\frac{1}{2}$ per cent. from 1 per cent. The cotton import duty, which was at

1. Report of the Indian Fiscal Commission.

2. Railway material and machinery were admitted free of any duty and one per cent. duty was imposed on iron and steel goods.

first left undisturbed, was raised to $7\frac{1}{2}$ per cent. in 1917 while the cotton excise duty remained at $3\frac{1}{2}$ per cent. only.

The financial difficulties of the Government did not end with the cessation of war. There was need for more revenue. In 1921 the general import duty was raised to 11 per cent. and in 1922 it was raised to 15 per cent. The duty on cotton piece goods was raised to 11 per cent. in 1921 and the excise duty was left unchanged. The duties on articles of luxury were specially enhanced. Motor cars and watches were subject to 20 per cent. in 1921 and 30 per cent. in 1922. The duties on liquors and tobacco were again increased. The duty on sugar was raised from 10 to 15 per cent. in 1921 and to 25 per cent. in 1922. The duty on matches was also considerably enhanced. In 1922, while the duty on machinery was retained at $2\frac{1}{2}$ per cent., the duty on iron and steel and railway materials was raised from $2\frac{1}{2}$ to 10 per cent. The duty on kerosine was raised by one anna per gallon and an excise duty of one anna per gallon was imposed on local production. Even cotton yarn which had been left free since 1896, was subject to 5 per cent. import duty in 1922. Some of the export duties were also introduced during the War period. In 1916 the exports of raw and manufactured jute and of tea were taxed. The duty on jute was doubled in 1917. In 1919, an export duty was imposed on raw hides and skins, not for the purposes of revenue but to afford protection to the indigenous tanning industry. This measure provided for a rebate of two-thirds of the duty being granted in favour of hides and skins exported to any country within the British Empire and tanned there. The details given above clearly show that the Indian Tariff was based on the principle of revenue collection till the Indian Fiscal Commission was appointed and action was taken on its recommendations. The high rate of tariff, though it was neither regular nor in consonance with a certain defined protective policy, could not, however, help affording protection to some industries in India.

(ii) **After 1921-22.** The year 1921 is a land-mark in the history of Indian Tariff policy since the Indian Fiscal Commission was appointed in this year. Before the recommendations of the Indian Fiscal Commission are discussed, it will be interesting to deal briefly with the events which led to its appointment and to see how a change took place in the angle of vision of those who ruled over the destinies of the country with regard to fiscal policy which was so far dictated, more or less, by the Home Government, to suit the interests of British manufacturers. Even when the Indian Industrial Commission was appointed the non-official

members of the Imperial Legislative Council urged the necessity of referring to it the examination of the tariff problem and grant of protection to Indian industries but this suggestion was not accepted and the Commission was precluded from the examination of this important problem.

The Montagu-Chelmsford Report of 1918 referred to the question of Indian Tariffs and particularly emphasised the strong feeling of the people in India on this subject. It observed that the educated Indian looked upon the policy pursued by the Government in this behalf with grave mistrust. "He believes that as long as we continue to decide for him we shall decide in the interest of England and not according to his wishes; and he points to the debate in the House of Commons on the differentiation of the cotton excise in support of his contention. So long as the people who refuse India, protection, are interested in manufactures with which India might compete, Indian opinion cannot bring itself to believe that the refusal is disinterested or dictated by care for the best interest of India." The Joint Select Committee of the British Parliament, while considering clause 33 of the Government of India Bill of 1919, observed on this subject :

"Nothing is more likely to endanger the good relations between India and Great Britain than a belief that India's fiscal policy is dictated from Whitehall in the interests of the trade of Great Britain. That such a belief exists at the moment there can be no doubt. That there ought to be no room for it in the future is equally clear..... A satisfactory solution of the question can only be guaranteed by the grant of liberty to the Government of India to devise those tariff arrangements which seem best fitted to India's needs as an integral portion of the British Empire..... It can only therefore be assured by an acknowledgement of a convention. Whatever be the right fiscal policy for India, for the needs of her consumers as well as for her manufacturers, it is quite clear that he should have the same liberty to consider her interests as Great Britain, Australia, New Zealand, Canada and South Africa. In the opinion of the Committee, therefore, the *Secretary of State should, as far as possible avoid interference on the subject when the Government of India and its Legislature are in agreement*, and they think that his intervention, when it does take place, should be limited to safeguarding the international obligations of the Empire or any fiscal arrangements within the Empire to which his Majesty's Government is a party."

In February 1921 the Council of State passed a resolution

requesting His Majesty's Government to grant "full fiscal autonomy subject to the Government of India Act." In March 1921 the Secretary of State, while approving of the principle laid down by the Joint Select Committee, dismissed the representation by the Lancashire cotton interests. In this despatch, dated the 30th June 1921, in reply to the above noted resolution of the Council of State, the Secretary of State, formally communicated the approval of His Majesty's Government of the convention recommended by the Joint Select Committee regarding Clause 33 of the Government of India Bill. A Committee of the Imperial Legislative Council appointed in 1920, to consider the policy of Imperial Preference and fiscal policy of India admitted that the latter subject could be effectively dealt with by a separate commission authorised to deal elaborately with it. In 1921 the question was again raised in the Legislative Assembly and on the seventh of October 1921, the Indian Fiscal Commission was appointed "to examine with reference to all interests concerned the tariff policy of the Government of India, including the question of the desirability of adopting the principle of Imperial Preference, and to make recommendations."

The Commission, realizing that 'the industrial development of the country has not been commensurate with the size of the country, its population and its natural resources,' made a number of recommendations, embodying the policy of protection to be applied with discrimination along the lines indicated in the Report. *The purpose of discrimination would be, to make a proper selection of industries which claim protection, and to see how much protection each industry requires, so as to make the burden on the community as light as is strictly necessary in the interest of the industrial development of the country.* The creation of a permanent Tariff Board was suggested, to investigate the claims of each industry applying for grant of protection, to watch the effect of tariff and to give general advice to the Government in carrying out the tariff policy. The general lines of guidance were laid down for the Tariff Board to be followed by it, while dealing with the examination of each industry. The industry in question ought to satisfy the following conditions before its claim for protection could be established :

1. That the industry possesses natural advantages.
2. That without the help of protection it is not likely to develop at all, or not so rapidly as is desirable ; and
3. that it will eventually be able to face world competition without protection.

The Report suggested that raw materials and machinery be ordinarily admitted free of duty, and that semi-manufactured goods used in Indian industries be taxed as lightly as possible. Further, that industries necessary for national defence should be well-protected, if necessary, provided the conditions for their development are not unfavourable.

The Commission is not in favour of export duties, unless they are imposed for revenue purposes and at a very low rate. Regarding the export of food grains, the restriction, if necessary, may be enforced by temporary export duties but there should not be any prohibition. The cotton excise duty is condemned unreservedly. The excise policy should be regulated purely in the interest of India.

In addition to these major recommendations there are others : for instance those pertaining to the importing of industrial bias to primary education, training of apprentices, difficulties caused by shipping, rebates, dumping, etc., and foreign capital.

The recommendations regarding Imperial Preference and the policy to be pursued in this behalf are discussed under the heading "Imperial Preference."

The recommendations of the Commission were subject to a minute of dissent by the Chairman and four other members. The latter stated that the main recommendation was hedged on by conditions and provisions which would impair its utility. They were in favour of unqualified protection. They also favoured the composition of the Tariff Board from among the non-official members of the Legislative Assembly. In 1923 the Government of India announced its acceptance of discriminating protection and appointed the Tariff Board, the first enquiry conducted by it being that into the iron and steel industry. The work done by the Tariff Board and the protection granted to different industries has been discussed in connection with the study of the growth of manufacturing industries in the previous chapter.

Government's Action on Tariff Board's Findings. The following statement by Sir Muhammad Zaffrullah., Commerce Member of the Government of India, laid on the table of the Legislative Assembly on February 13, 1937, shows the cases in which the recommendations of the Tariff Board which were either not accepted or were accepted in a modified form :—

Increase of duties on Steel (1924) : The recommendations accepted in a modified form.

Grant of protection to the cement industry (1925) : The recommendation to pay bounties on cement consigned from an Indian factory to the ports or to railway stations within a specified radius of the ports was not accepted.

Grant of protection to the cotton mill industry (1927) : The recommendation by a majority of the Board for payment of a bounty on yarns of higher counts was not accepted. The recommendation by a majority of the Board to increase the import duty on cotton piece goods from 11 per cent. to 15 per cent. *ad valorem* was not accepted.

Grant of protection to the plywood and tea-chest industry (1927) : The recommendation for an export duty on tea packed in chests not made in India was not accepted.

Heavy chemical industry (1929) : Recommendations accepted in a modified form.

Salt industry (1930) : Recommendations accepted in a modified form.

Continuance of protection to the cotton (textile) industry (1932). Recommendations accepted in a modified form.

Grant of protection to the glass industry (1932) : Recommendation not accepted.

Removal of tariff inequality in respect of Healds and Reeds (1934) : Recommendations not accepted.

Grant of protection to the Woollen (Textile) Industry (1935) : Recommendation not accepted.

Grounds for Rejection. The Government turned down the recommendations of the Tariff Board in several cases on the ground that the industry concerned did not possess an abundant supply of raw material. The case of the Indian glass industry is a good instance in point. The recommendation of the Tariff Board on the woollen industry was not accepted on the ground that the conclusions of the Tariff Board were not conclusive as the entire industry did not present its case to the Board. The Tariff Board should be given powers to compel manufacturers in the industry under investigation to supply the necessary data to them.

Necessity of Reform of Tariff Policy. The policy of discriminating protection has fallen far short of the requirements of our country and the aspirations of her people. "The policy recommended by the Majority of the Fiscal Commission is obsolete and, if adhered to in future, will not lead the country much further towards the goal of industrialization.

The Tariff Board is handicapped by the steel frame of the conditions which an industry claiming protection is required to satisfy very meticulously. The condition regarding an abundant supply of raw materials must not be rigidly insisted upon, if the industrial progress of the country is to be achieved on a scale found in Western countries..... India's cotton textile industry needs protection against the competition of Japan and the United Kingdom. But who does not know that none of these two countries produces cotton ?..... Government's industrial policy must be one of full-fledged protection and the Tariff Board must be made a permanent institution entrusted with the task of recommending schemes of protection that will lead to the rapid industrialization of the country on proper and sound lines, the Board being left unfettered in its enquiry by the steel frame of conditions like the ones already in operation....^{77*}

III. IMPERIAL PREFERENCE

History. The scheme of Imperial Preference aims at bringing about economic unity among the countries within the British Empire by showing preference towards the goods coming from within the Empire as distinguished from goods from non-Empire countries. This is to be accomplished by lowering import duties in favour of the former so that the duties paid by the latter class of goods are higher. The scheme is somewhat analogous to the creation of the zollverein in Germany during the last century.

The earliest steps in this direction were taken by Canada in 1897, when she reduced duties by one-eighth on British goods. In 1898 the preference was fixed at one-fourth of the duties and granted to the United Kingdom. It was extended to other British Colonies, which granted Canada favourable treatment. The Colonial Conference of 1902 recognised the principle of Imperial Preference as one of general application, inasmuch as it was considered that it would stimulate mutual commercial intercourse and develop the resources and industries of the several units of the Empire and thereby strengthen it. The other Empire countries were asked to take such measures as might be necessary to give effect to it. It was, however, recognised that the scheme should be enforced on a voluntary basis and the adoption of preference should neither mean establishing of a free trade within the Empire nor an abandonment of protectionist policy within the respective countries. The United Kingdom was also expected to grant certain pre-

*Indian Journal of Economics, January, 1938, article on India's Protective Tariff Policy under Montford Reforms by A. R. Bhat, M. Com.

ferences. In obedience to these resolutions New Zealand and South Africa granted preferences in 1903 and Australia followed in 1907. The United Kingdom was, however, averse to making any changes in her fiscal policy by granting preferences. She could not, as a great exporter of manufactured goods and importer of raw materials and food products, respond to the Dominions' plan of Imperial Preference by raising the duties on the better class of goods, coming from the non-Empire countries. It was in her interest to buy these goods in the cheapest markets. At the Colonial Conference of 1907, the subject was again discussed but the British Government declined to extend any preferences to the Empire.

In 1903 the Government of India, on being consulted over this question, came to the conclusion that from the economic standpoint she had something, but not perhaps very much, to offer the Empire, that she had very little to gain in return, and that she had a great deal to lose or to risk.

Thus all the self-governing Dominions gave preference in some form to the products of the United Kingdom and extended in some cases to those of other parts of the Empire including India. India and a majority of the Crown colonies did not adopt the scheme. The British Government also did not change her policy. This position remained the same till the outbreak of the Great War.

The Great War taught a fresh lesson to the Empire in favour of consolidating its economic policy. It was considered necessary to make the empire self-sufficient as regards the food supplies, raw materials and essential industries. Independent action was taken by some members of the Empire in order to strengthen its economic links with other units. The most remarkable stage was achieved, however, in 1919 when the United Kingdom without altering its general tariff policy granted to the whole Empire preferential rates, which were usually five-sixths or two-thirds of the full rates, on nearly all articles on which import duties were levied. Some of the Crown colonies also introduced preferential rates. At this stage the Government of India could not ignore the movement, which was thus generally given effect to, by the Empire countries. From 1917 onwards, therefore, this question has been under its serious consideration. It has already been noted down that in 1919, the principle was introduced when the Government of India provided for a rebate in export duties on hides and skins, exported to the Empire and tanned there. The enquiry made by the Fiscal Commission was the result of an enquiry

sought to be made by the Government of India with regard to the grant of preference in favour of goods of Empire origin.*

The Indian Fiscal Commission, after examining the history of Imperial Preference and the whole controversy to which it had led, submitted the following recommendations :—

(a) That no general system of Imperial Preference be introduced ; but

(b) That the question of adopting a policy of preferential duties on a limited number of commodities be referred to the Indian legislature after preliminary examination of the several cases by the Tariff Board.

(c) That, if the above policy be adopted, its application be governed by the following principles :—

(1) That no preference be granted on any article without the approval of the Legislature.

(2) That no preference given in any way diminish the protection required by Indian industries.

(3) That preference do not involve on balance any appreciable economic loss to India.

(d) That any preference which it may be found possible to give to the United Kingdom be granted as a free gift.

(e) That in case of other parts of the Empire preferences be granted only by agreements naturally advantageous.

The scheme of Imperial Preference remained in the air till the Ottawa Pact was concluded in August 1932 and the tariff changes were made in accordance with this agreement from 1st January 1933, though minor changes in the tariff were occasionally made giving preference to British goods. (e. g. Preference given to British cloth and steel in the Indian market.)

Examination of the Scheme. The scheme will be examined from the general point of view and the Indian point of view in particular.

(i) **General Consideration.** Preference to Empire Countries may be enforced by lowering the already existing duties on the goods coming from within the Empire or raising duties against the non-empire goods. Generally speaking, the price of goods will therefore be raised approximately

*Resolution moved by Sir George Barnes in the Imperial Legislative Council in February 1920.

to the extent of the rise in duty in the latter case,* while in the former case there may not be any further rise. The consumer who bears the burden of rise in price will therefore be burdened further in the latter case. In the case of grant of protection the consumer undoubtedly bears a sacrifice but for the benefit of the home producer. In this case the benefit of his sacrifice goes to the producers in countries enjoying preference. Here, however, the relative importance of the sources of supply of goods is to be considered. If a considerable portion of the supply of goods comes from the favoured countries, their price will be determined by the lower duty and not by the higher one. The consumer will thus get the benefit of the lower rate. But if the favoured countries cater only to a small portion of the market of the home country, *i. e.*, their supply is small as compared to that of the foreign countries, against whom there is discrimination, the price of goods will be determined by the higher duty and the difference between the two duties will be a burden on the consumer, the benefit of which will go to the favoured nations.

It may be said here, with a certain amount of emphasis that even in the case where the favoured countries do not command a wide market within the home country, they may be able to stimulate their industrial production, with the help of the favoured treatment and thus after sometime drive out the foreign competitor, thereby establishing more or less an exclusive market. The prices will thus come down and will be determined by the lower duties. This argument is analogous to that advanced in favour of protection, where the consumer is asked to make only a temporary sacrifice, but for the development of home industries. A further application of this very analogy will necessitate the extension of preference to such of the Empire goods only as have the possibility of success against foreign competition and possess all the necessary facilities, in the shape of raw materials etc.

From the point of view of the Government, grant of preference does not benefit it, in proportion to the sacrifice involved on the home consumer. When a simple import duty is imposed, the price of the commodity rises, the consumer pays a higher price and the tax goes to the Government exchequer. But when a preferential duty is imposed, the benefit goes to the foreign (preferred country) producer. This loss of revenue, actual or relative (to the amount which it

*The effect of a tax on the price of a commodity depends upon the conditions of demand and supply and their action and interaction on each other.

should receive in proportion to the burden placed on the consumer), is not only true in the case where duties are lowered in favour of a particular country but also where they are raised against foreign countries.

The advantages of preference are not to be ignored. The home producer may consider it a form of additional protection if the duties are raised, even though against the foreign competition only. This argument, however, is not sound inasmuch as it is presumed that a protected industry is enjoying the maximum benefit, by keeping in view the consumer's sacrifice, a further rise in it will not be justified.

There is, however, the possibility of the country granting preference to obtain similar advantages in the markets of those countries which are benefited. Its exports to those countries may need an artificial stimulus and thereby gain a step against foreign competition. Moreover, direct shipping connection between those countries extending preference to each other will be naturally beneficial. Discussing the advantages of Imperial Preference, Prof. B. K. Sarkar says.

"Under the ægis of Imperial Preference the circulation of goods for consumption as well as production, services and capital between the different members of the Empire is likely to be more intense and vigorous. But this intensity and vigour can but manifest themselves by influencing the outside world as consumer of its goods and producer for its markets. Imperial Preference, which is apparently intended to bring about an economic autocracy for the British Empire, will factually turn out to be but a force in the elevation of the entire world to a higher standard of living.

"Besides, it has been pointed out that Imperial Preference as actually established is not of a rigid character. The system is elastic enough to admit of new 'preferential' arrangements with non-Empire countries".

(ii) **Indian Point of View.** The Indian point of view will require an examination from the economic and the political aspect. In considering its economic aspect it is necessary to analyse the direction and composition of India's foreign trade. It is after this examination that we will be able to know what economic advantages will accrue to the country and what benefits it will bestow on other countries by joining in the scheme of Imperial Preference. The following table will show the percentage share of the United Kingdom and the British Empire in the Indian merchandise trade.

Countries	Pre-War Average		War Average	Post-War Average	1928-29	1931-32	1933-34	1934-35	1935-36	1936-37								
	Imports	Exports	Imp.	Exp.	Imp.	Exp.	Imp.	Exp.	Imp.	Exp.								
British Empire	69.7	41.1	65.4	51.7	65.2	41.4	54.0	35.5	44.8	44.5	50.0	46.7	49.4	45.9	48.7	46.4	58.8	44.2
United Kingdom	62.8	25.1	56.4	31.1	57.6	24.2	44.7	21.4	35.5	28.2	41.7	32.2	40.6	31.6	38.8	31.5	48.10	31.1

The figures reveal certain interesting conclusions. Before the War the share of the British Empire, more particularly that of England, in the import trade of India was considerable, while the share which they enjoyed in its export trade was much less than that of foreign countries. After the war there was a slow decline in both exports and imports. In recent years there has taken place an improvement in the share of Great Britain due to the Ottawa Pact. The share of the British Empire and the United Kingdom in its export trade being lesser than that of the foreign countries, a scheme of preference will not benefit India to a great extent while its repercussions in the foreign markets will adversely affect the export trade there. On the other hand the Empire and the United Kingdom will derive a substantial benefit from the preferences due to the high percentage of import trade which they enjoy in the Indian market. Again, it is found that broadly speaking, the exports of India consist mostly of raw materials and food products, while the imports consist of manufactured goods. In the words of the Indian Fiscal Commission, "The economic advantage derived from a preference tends to be more important in the case of manufactured goods than in the case of raw materials.* It is the manufactured goods which have got to face keener foreign competition in outside markets than the raw materials or food products, which are generally admitted free of duty into foreign markets. The composition of India's foreign trade thus limits the possible advantages to be derived by it from any scheme of preference. It was on this consideration that Lord Curzon's Government in 1903 stated that the possibilities of economic gain to India were extremely limited. In 1919, the United Kingdom reduced duty by one-sixth on Empire goods and by this concession India appeared to feel interested in her exports of tea, tobacco and coffee. By a careful analysis of the preferences enjoyed by these goods it is, however, evident that "Indian exports on the whole are not of a nature capable of benefiting to any great extent by preferential rates, particularly such as can be granted in the United Kingdom." At the same time grant of preference to other countries will naturally inflict a loss on her, though it would confer very great advantages on goods sent to India and which especially in the case of the United Kingdom are manufactures.

Very great fears are entertained by the Indian public regarding the effect of preference on protection enjoyed by the growing industries of India. This is a very serious

*Indian Fiscal Commission, P. 113.

consideration and the Fiscal Commission has rightly remarked that "it should not be allowed in any way to diminish the full protection which it may be decided any Indian industry requires." This is what the Dominions have kept in view, while granting preferences to the United Kingdom. As a safeguard against any adverse effect on the protection policy by a scheme of preference the minority report of the Indian Fiscal Commission clearly laid down :

"We are in favour of the principle of Imperial Preference on the distinct condition that India should in this matter be put on the same footing of freedom as is enjoyed by the self-governing Dominions, and that the non-official members of the Legislative Assembly should be given power by legislation or other equally effective means to initiate, grant, vary and withdraw preference as may be necessary in the interest of India, in all its aspects."

It means that by making India autonomous in fiscal matters, it can enforce any policy in this behalf, which may be advantageous to it while it can pursue the policy of protection, with unabated vigour. There should be no infliction from an outside body.

The consumers are no doubt the real sufferers and the legislature should see that their sacrifices are also not very large, especially when they are already under the burden of protective duties.

The political aspect of the question of Imperial Preference is also one to be taken into consideration. The Indian sentiment is decidedly against preference on political grounds. It is said that the Dominions have received the gift of self-government from the mother country and are therefore actuated by feelings of gratitude towards her, while granting preferences to her. The Indian opinion, on the other hand, has been embittered by the imperialistic policy pursued by England, in part, in fiscal matters. She does not enjoy the same political status as other dominions and, as such, extreme Indian opinion is strongly against any preferences being granted to her. So far as Colonies are concerned, the opinion against them is even stronger, especially as long as Indians are not given economic and political privileges in those countries and anti-Indian legislation exists there. The dissenting members of the Indian Fiscal Commission therefore wish "that the condition precedent to any agreement with a British Dominion in trade matters on the basis of reciprocity should be the recognition of the right of the Indian people to a status of complete equality and the repeal of all anti-Asiatic laws, so far as they apply to India."

The Ottawa Pact. A conference of the representatives of the Empire countries met at Ottawa during July-August 1932 and concluded a trade agreement based on the principle of Imperial Preference. Indian delegates, who were nominated by the Government of India and not elected by the legislature* signed the Pact. A great controversy raged round the Pact on the floor of the house and in the press. The Government, however, managed to get through the legislation necessary to give effect to the tender agreement concluded between the Government of India and His Majesty's Government. The Indian Tariff Amendment Act of 1932 came into force from 1st January 1933. A supplementary agreement regarding iron and steel was signed subsequently. *viz.*, on 22nd September.

The Act of 1932 mentions the various articles to which preference is granted. India grants to the United Kingdom $7\frac{1}{2}$ per cent. preference on certain classes of motor vehicles and a ten per cent. preference on certain others and in return received on her exports to the United Kingdom a ten per cent. preference.

No uniform system has been observed in the changes brought about in the tariffs while granting preference; in some cases, the previous rates have been raised all round and in others they have been partly raised and partly lowered. The standard rates have not, however, exceeded 50 per cent.

The general argument advanced in favour of or against a scheme of Imperial Preference apply generally to the Ottawa Pact also. In the period of world-wide depression commencing from 1929, which affected raw materials and food products especially, it was considered desirable to push on any scheme which would help India in strengthening its export markets. This period coincided with one of selfish nationalism, tariffs and trade restrictions blindly pursued by every country struggling for outside markets and desirous to be self-sufficient. The admirers of the Pact therefore congratulate India for the decision that it took in gaining ground in "the world's most stable and largest open market" *viz.*, the United Kingdom.

The figures regarding India's export trade to England during the period subsequent to the signing of the Pact, show that it received a definite stimulus. The increase took place both in preferred articles as well as non-preferred ones, the former was obviously due to the Pact and the latter to other causes.

* They were not considered true representatives of India's economic interests.

That the Pact would lead to retaliatory measures from foreign countries is not a sound argument. It was adopted at a time when the different countries of the world had adopted restrictive policies of varying types to suit their particular requirements, and it was thus, more or less, a defensive weapon. The decrease in India's exports to foreign countries was due to these restrictions though an increase in her exports to the United Kingdom was obviously due to the scheme of preference.

The opponents of the scheme point out, that the Ottawa Pact has not conferred any benefit on the country but has rendered positive harm. It gave the export trade towards the United Kingdom a push only at the cost of other countries, where competition became worse. It has also been pointed out that preference in certain articles was not needed, for example tea or even jute manufactures, goat skins, castor seeds, lac, myrobalans and mica. In some cases, the possibilities of further expansion in trade were very limited. The general conclusion was that only a few articles like linseed, carpets, rugs and rice had benefited by the scheme. The sacrifices made by the Government revenues and the consumer have been ignored in calculating its advantages.

Again, it is considered desirable for India to develop her varied natural resources and find out outlets for her goods throughout the world, and not only in the United Kingdom, against whose manufactured goods she wants protection. Most of the goods exported by India are raw materials and the United Kingdom is always anxious to purchase these.

India must always try to increase her exports to foreign countries and with the help of these pay off her debts to England. For retaining her foreign markets she must therefore enter into bilateral agreements with other countries. In spite of the Government publicity and propaganda in favour of the Ottawa Pact, the verdict of the Legislative Assembly was passed against it in March 1936, when a definite recommendation was made to terminate it and the Government of India was asked to enter into trade treaties with other countries after an examination of the trend of trade with them. In October 1936, it was decided by the Government of India that the agreement of 1932 be continued, until it was replaced by a new one.

A new trade agreement between England and India, was to be forged.

The Indo-British Textile Talks and their break-down. (May 1938) The Lancashire delegation wanted India to import

from Lancashire 666,000,000 yards of piece goods, accompanied by a tariff reduction of 9 per cent., thus making the import duty on cotton goods only 11 per cent. with a view to achieve the above-mentioned quantum of imports. It may be pointed out here that the imports of the cotton piece goods from the United Kingdom into India fall from 439,676,000 yards in 1935-36 to 266,608,000 yards in 1937-38. The Lancashire delegation on their part offered to take 400,000 bales of Indian cotton with a pledge to work for a higher figure over the period of any agreement.

The Indian delegation offered to import 400,000,000 yards of Lancashire piece goods accompanied by a reduction of tariff from 20 per cent. to 15 per cent. in return for a guaranteed off-take of Indian raw cotton of 650,000 bales.

In view of the gap between the two offers—the talks, which were being carried on at Simla, broke down.

Indian commercial opinion demands the termination of the Ottawa Agreement which was denounced by the vote of the Legislative Assembly in 30th March, 1932 but which was kept pending by the Government till a new pact was agreed upon. The necessity of entering into a bilateral agreement by India with her several customers has received a further strength.

IV. TRADE AGREEMENTS WITH OTHER COUNTRIES.

(i) **Indo-Japanese Trade Agreement.** Towards the end of 1932-33, the Japanese exports to India increased to a considerable extent, the facilities in this connection having been afforded by the depreciation of the Japanese Currency in the foreign markets. The Indian cotton mills were faced with a very serious situation caused by the cheap Japanese goods, which practically flooded the market. The import duties were increased in 1932 to 50 per cent. *ad valorem* with a minimum specific duty of 5 $\frac{1}{4}$ as. per lb. on plain grey non-British cotton piece goods but this did not relieve the local industry, which desired some more effective protection. It became therefore essential to raise the duties still higher.

The Government of India was forced under the circumstances to denounce the Indo-Japanese Trade Connection of 1904. This was done in April 1933 and further increase in import duty (75 per cent. *ad valorem* on foreign cotton piece goods, with a minimum of 6 $\frac{3}{4}$ as. per lb. on plain greys) were announced in June 1933. This led to retaliatory measures in Japan against Indian raw cotton. Finally, steps were taken by the Governments of Japan and India to come

to an agreement. This agreement was signed in 1934. The Japanese boycott of Indian cotton was withdrawn and the Indian import duty of 75 per cent. was reduced to 50 per cent. The agreement of 1934 was drawn up for a period of 3 years. It comprises of two parts, the Convention and the Protocol.

"The Convention provides among other things, (a) mutual most favoured nation treatment (b) the right to impose special customs duties to correct the adverse effect on trade of the variation in the exchange relation between the yen and the rupee ; and (c) the right to protect the industries of either country.

"The Protocol provided, in the first place, for the upper limit of the duties which India might impose on Japanese cotton piece goods. These were 50 per cent. *ad valorem* or 5 $\frac{1}{4}$ as. per lb. whichever is higher on plain grey goods ; and 50 per cent. *ad valorem* on other goods. It was further provided that if a specific duty was levied in future on other goods, it did not exceed 5 $\frac{1}{4}$ as. per lb.

"The rest of the Protocol was chiefly concerned with an arrangement by which the export of raw cotton from India to Japan was related to the import of cotton piece goods from Japan to India. The underlying idea was to safeguard the Japanese market for Indian raw cotton, and also to see that the interests of the Indian cotton industry did not suffer. From the Japanese point of view, the idea was to have an assured market for her piece goods in India and to relieve her trade of prohibitive duties."

Quotas were provided* for the import of Japanese cotton goods into India and the export of raw cotton to Japan.

The trade treaty has conferred advantages on the trade and industry of both the countries, though the effectiveness of the quota system has been criticised. The Indian cotton grower has gained and so has the Japanese manufacturer.

The agreement of 1934 expired in 1937 and a fresh agreement, modifying the old quota of exports and imports, has been arrived at.

(ii) **Bombay-Lancashire Textile Agreement.** In 1933 the representatives of the Indian and British cotton manufacturers met and concluded an agreement. This is known as Mody-Lees Pact. While agreeing that the Indian cotton textile industry ought to obtain a reasonable measure of protection even against the imports of cotton yarns and piece goods from the United Kingdom, it was agreed that

*Commercial Relations Between India and Japan, by Vakil and Maluets.

some special consideration might be shown to this country as against other countries. The Indian raw material should also be commended specially to the British manufacturers. The agreement has been criticised by many people. While recognising the advantage gained by the Indian cotton grower, by an increased use of Indian cotton, it was pointed out that it had not the support of the entire Indian textile industry and greater benefit accrued to the English manufacturers. The agreement it was pointed out, did not definitely lay down the minimum quantity of raw cotton to be purchased by the Lancashire manufacturers.

(iii) **Indo-British Trade Agreement of 1935.** A trade agreement was arrived at between the United Kingdom and India in January 1935. It was considered supplementary to and co-terminus with the Ottawa trade agreement.

"It sets out in precise terms the principles which have guided the Government of India's fiscal and tariff policy and practice since July 1923 as a result of a resolution adopted by the Assembly and commits them to extending protection to such industries only as can establish claims thereto in accordance with the policy of discriminating protection laid down in the resolution. It further binds them to afford to the industry concerned in the United Kingdom an opportunity of stating its case before the Tariff Board when the question of granting substantive protection to an Indian industry is referred to it. In the Agreement, His Majesty's Government recognise that the economic well-being of India may demand the application of a policy of discriminating protection; that in pursuance of that policy the Indian industry concerned is entitled to adequate protection against all rivals and competitors whosoever they may be; and that the revenue need of India must normally dictate the level of these duties which are not fixed upon a protective basis. The agreement also requires His Majesty's Government to develop and stimulate the import into, and consumption in, the United Kingdom of raw cotton and semi-manufactured materials from India and to continue the privilege of duty-free entry of Indian pig iron into the United Kingdom so long as the duties on iron and steel articles imported into India are, subject to certain conditions, not less favourable to the United Kingdom than those provided for in the Iron and Steel Duties Act, 1934."*

This agreement was also severely criticised by many people as an attempt to whittle down the Fiscal Autonomy Convention and also the principles involved in the policy

*India in 1934-35.

of discriminating protection. It was said that it is more favourable to the English rather than Indian interests.

The general opinion in the country is in favour of the Government entering into bilateral trade agreements with other countries. These agreements will be based on the principle of reciprocity and will help India to extend her exports without hindering her industrial and commercial progress.

A REVIEW OF THE TARIFF POLICY OF INDIA*

Discriminating Protection in Practice. The steel industry has been placed on the list of protected industries. It fulfilled the terms of discriminating protection. Besides, it was considered a key industry requiring protection on non-economic grounds. The industry benefited by protection given to it from 1924 to 1934. The production was expanded and the cost of production was reduced. The Iron and Steel Duties Act passed in November 1934 introduced new considerations and departed from the principles laid down by the Fiscal Commission. The Tariff Board concluded that, "on all articles sold by the steel company in direct competition with British imports, either no protective duty is required at all, or if any is required, the rates are lower than the normal rates of revenue duty."

Now it may be even conceded that Tatas would be able to compete with British steel without any protection. But removing protection from the steel industry will limit the production of steel to one concern alone. There is certainly a dire need for encouraging new steel factories so that the domestic demand for a 'basic' or a key product like steel may be met from within the country.

By the same Act the preference given to the United Kingdom was increased by enhancing the duties on the Continental steel. The loss of customs revenue has been made up by the imposition of excise duty of Rs. 4 per ton on all steel ingots manufactured in India. It would certainly be questioned whether an improper use of the excise duty has not been made here.

The cotton industry is also a protected industry. The import duties have varied from time to time. In the budget of 1930-31, the revenue duty on cotton goods was increased from 11 to 15 per cent. but an additional protective duty of 5 per cent. was imposed on goods of non-British origin. Subsequent legislation increased the difference between the import duty on British and non-British goods. In June

1. Article by Prem Chand Malhotra, M. A., in Indian Journal of Economics, 1937.

1933 British cotton goods paid a 25 per cent. duty and the duty on Japanese goods was 75 per cent. By the Indo-Japanese agreement the duty on Japanese imports was reduced to 50 per cent. In 1936 the duty on cotton goods of British origin was reduced to 20 per cent.

It would be clear from the above two instances that the *preference to British industries has assumed the status of an independent principle of policy.*

The sugar and the match industries owe their present position to the sheltering care of protection enjoyed by them. There is an excise duty on the manufacture of both sugar and matches. The protection of industries in India has given rise to the question of the proper occasion and the purpose which the excise duties should serve.

The Tariff Board recommended protection for the glass industry. But the Government did not agree. They granted a refund of the entire import duty on soda ash of British or colonial origin utilised in glass manufacture and a refund of the excess of over 10 per cent. duty of other soda ash. "It has been urged that the Government have not only given any substantial protection to the glass industry, but have by this made it difficult to develop the embryonic heavy chemical industry in India."

The points worth noting from the above illustrations are :—

(1) The Government may not accept the decisions of such a competent body as the Tariff Board.

(2) the extension of the principle of the Imperial Preference to a large number of articles.

(3) the imposition of excise duties on growing industries.

The Fiscal Commission recommended that *industries essential for national defence be adequately protected.* The Indian shipping industry deserve protection on the above score. But it has not received any help from the Government so far.

The constitution of a *permanent* Tariff Board was considered necessary by the Fiscal Commission. It cannot be said that a permanent Tariff Board exists in India. Although the claims of various industries have been investigated by different Tariff Boards, yet the Boards have been *ad hoc* committees. At present there is no Tariff Board in existence. The Commerce Member assured the House in this year's Simla session that the Government did not contemplate abolishing the Tariff Board for good and that the

last Tariff Board was disbanded as there was no problem awaiting investigation by it. The existence of a permanent Tariff Board is necessary for having a continuity of tariff policy.

Imperial Preference. It is not incorrect to say that a general system of Imperial Preference has been introduced in India by stages. The Ottawa Pact left no room for doubt about the adoption of Imperial Preference by India. This was further confirmed in the Indo-British Pact (1935). Notice of the termination of Ottawa Pact was given by the Indian legislature in this year's winter session as it was thought that the Pact involved on a balance an appreciable economic loss to India.

The Indo-British Pact. The Indo-British Pact entered in January 1935 introduced changes of a fundamental nature in India's Fiscal Policy. According to the pact the Indian Tariff Board must in future "afford full opportunity to any industry concerned in the United Kingdom to state its case and answer the cases presented by other interested parties." The implication of the above clause would be that Indian industries would have to consult British industries every time they wanted protection or as regards the suitability of measures they wished to adopt.

The Fiscal Convention of 1921, which gave India the right to choose the right fiscal policy for her, for the needs of her consumers and manufacturers, has been threatened by this Pact.

The Fiscal Policy and the New Constitution. According to the New Government of India Act, bounties and subsidies should be available, without distinction to all firms and individuals engaged in a particular industry at the time the enactment authorising them is passed. In the case of companies entering the field after that date the Government should be at liberty to impose conditions of eligibility [that the company be registered in India, that a proportion of directors (not exceeding half) are Indians and the company shall give reasonable facilities regarding the training of Indians]. The Governor or the Governor-General may not act on the advice of the Ministry if the subsidies and bounties proposed involved unfair discrimination against British interest.

According to the principle of reciprocity embodied in the New Act "No subject of His Majesty domiciled in the United Kingdom and no company registered in the United Kingdom should be subjected to any disability or discriminations to which subjects of His Majesty domiciled in India

or companies registered in India are not subjected in the United Kingdom."

The above-mentioned provisions of the new Act have placed the British people on the level of the nationals of India. All facilities meant to encourage Indian industries must be extended to the British concerns in India or else the measures would be interpreted as of a "discriminatory nature" and so would be disallowed. A bill for the reservation of the coastal traffic of India to Indian shipping would be treated as discrimination against the British.

The principle of reciprocity is unfair to India. Opportunity for industrial development in the United Kingdom for Indians is of practical value. They want adequate opportunities in their own country against the powerful vested interests.

Conclusion. Protection for Indian industries has been vitiated by new principles introduced in India's Fiscal policy. India would not be able to follow a vigorous tariff policy which is so necessary for the speedy economic development of the country. The principle of Imperial Preference has now become a cardinal feature of India's Tariff Policy. Those of our industries will not be able to get adequate protection in which the United Kingdom itself is interested. Our tariff policy will be influenced by British industrialists as they will be given opportunity of putting forward their case and answering the Indian case for protection put forward before the Tariff Board. Any privilege or concession granted exclusively to an Indian industry will be interpreted as discrimination against the British under the New Government of India Act. The principle of reciprocity is meaningless for India. The new Act restricts the freedom of Indian Legislature in the matter of development of industries on national lines. The fact that foreign concerns establish themselves in India behind the protection wall of the country, the grant of bounties and subsidies to non-Indian enterprise on equal terms with Indian firms, (conditions of eligibility in foreign capitalists will be imposed on those which establish themselves after 1935) are likely to create a duality in India's industrial structure as is to be found in China due to the existence side by side of Chinese and foreign—owned factories.

SUMMARY

Free traders start with the law of comparative costs as their first argument in defence of their policy. They exaggerated the hardships imposed by protection especially on the consumers. On

the other hand the protectionists advance their arguments in the interest of infant industries, diversification of occupations, production of war materials and for protecting the industries against foreign dumping. Even Adam Smith is quoted in their favour.

Early tariff history in India was not based on protection. The duties were imposed only for revenue purposes. The cotton excise duty was felt as a great hardship by the Indian manufacturers. During the Great War the import duties were raised. The fiscal autonomy convention was granted by the Montagu Chelmsford reforms. The Fiscal Commission recommended grant of discriminating protection and the Government of India accepted the policy. The Tariff Board was appointed to examine the claims of particular industries in accordance with the three important conditions laid down by the Commission.

The earliest steps in the direction of Imperial preference were taken in 1897 by Canada. The other Colonies followed the lead. The principle involved was discussed among the Empire countries and generally accepted. In 1903 the Government of India was consulted but it came to the conclusion that India had much to offer but very little to gain by it. The feeling in favour of bringing about economic unity grew stronger during and after the War. The Indian Fiscal Commission was not generally in favour of Imperial preference but accepted its conditional introduction. In a manner that would bring about an appreciable economic gain to the country and would not diminish the protection required by Indian industries. Indian opinion is generally against Imperial preference. It will grant benefit to the foreigner at the cost of the consumer. It is apprehended that it will bring about retaliation and adversely affect India's export trade. Figures of imports and exports are given to elucidate the point. From the political point of view of the scheme is not acceptable to the people as long as the Colonies have on their statute books anti-Indian legislation. The Ottawa Pact was signed in 1932. India was represented at the Ottawa Conference by Government nominees. According to the Act of 1932, incorporating the Pact, India granted preference to the United Kingdom at the rate of $7\frac{1}{2}$ per cent. on certain classes of goods and 10 per cent. on others. The trade between England and India increased subsequent to the signing of the Pact. The Pact though agreed to by the Legislative Assembly was generally resented by the people. In March 1936 the verdict of the Assembly was given against the Pact and the Government of India was asked to enter into trade treaties with other countries. The Indo-Japanese Trade Agreement was drawn up in 1934. An upper limit for duties on Japanese goods was fixed and the export of raw cotton from India to Japan was related to the import of cotton piece goods from

Japan to India. By this arrangement the interests of the Indian raw cotton, Japanese and Indian cotton industry were safeguarded. The Bombay-Lancashire Textile Agreement (Moody-Lees Pact) was signed in 1933. It was agreed that the Indian cotton textile industry ought to obtain a reasonable measure of protection even against the import of cotton yarns and piece goods from the United Kingdom, but some special consideration might be shown to this country as against other countries.

In 1935 trade agreement was signed between India and the United Kingdom supplementary to and co-terminus with the Ottawa trade agreement. It was criticised by people in India.

QUESTIONS ON CHAPTER XIII

1. What are the general arguments advanced in favour of and against protection? How far do they apply to India?
2. Give a short history of Indian tariff before the Great War. What were the principal considerations in the determination of the tariffs?
3. What do you understand by discriminating protection? On what grounds is it to be preferred to unconditional protection?
4. Give a short history of Imperial preference. Why has not Indian opinion generally favoured this scheme?
5. Indicate the principal effects of the Ottawa Trade Pact on Indian trade and industry (P. U. 1935).
6. Examine some of the trade arguments which India has recently entered into during recent years.
7. State the conditions under which it is beneficial to grant protection to industries. Has protection in India been based on these principles? (P. U. 1938)

